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May 1958

Office of the Chief Engineer
1807 Building
New York

WATER RESOURCES DIVISION
WASHINGTON, D. C.

Laboratory Report

58-35

ANALYTICAL PACKAGE

Cliff-Dow Site
Marquette, Michigan

Volume 1 of 3

Samples Received April 14, 1989

Prepared for: O'Brien & Gere Engineers, Inc.
1304 Buckley Road
Syracuse, NY 13221

Prepared by: OBG Laboratories, Inc.
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Authorized Gregory N. Mansel

Date May 18, 1989

Reviewed ART

Date 5-18-89

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NARRATIVE

INTRODUCTION/LABORATORY RESULTS

This report summarizes the results of the analyses of five soil samples for Volatile and SemiVolatile organics. The samples were delivered in April, 1989, from the Cliff-Dow site in Marquette, Michigan, and analyzed by OBG Laboratories, Inc. The analytical results are reported in Section 1 on standard Contract Laboratory Program (CLP) forms.

CHAIN OF CUSTODY/LAB CHRONICLE

The samples were collected at the Cliff-Dow site in Marquette, Michigan, by O'Brien & Gere Engineers, Inc. and hand-delivered to OBG Laboratories, Inc. in Syracuse, New York. The chain of custody forms documenting this transfer are presented in Section 2. When the samples were received by the Laboratory, the sample coordinators inspected and processed the samples for analysis. Samples were placed in a secured walk-in cooler. When chemists removed these samples for testing, Sample Control Records were signed to document the chain of custody. Attached also is a letter of authorization for the analysis of the samples.

METHODOLOGY

The soil samples were analyzed using procedures listed in the USEPA CONTRACT LABORATORY Statement of Work for Organics Analysis Multi-Media, Multi-Concentration 2/88.

QUALITY CONTROL

The quality control program included laboratory blanks, matrix spikes, matrix spike duplicates and surrogate recoveries. This documentation is included in each of the respective portions of the packages. The QC results are included in the CLP format.

CASE NARRATIVE - VOAs

No excursions were noted.

Samples TP-3 and TP-6 gave complex chromatograms, with the library searches revealing several tentatively-identified hydrocarbons.

CASE NARRATIVE - BNAs

Because of matrix effects from the carbon-like samples, not all surrogate recoveries and matrix spike recoveries were within QC limits. This is summarized as Form 3. Very complex chromatograms were noted that affected the last two internal standard areas (see Form 8).

RAW DATA

The raw data from the analyses are presented in a CLP format in Section 3. Also included are the assignment sheets for the projects, along with copies of the instrument injection logbook pages pertaining to the sample analyses.

SECTION 1

LABORATORY RESULTS

For reporting results, the following EPA contract-specific qualifiers are used:

- U Indicates compound was analyzed for, but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.

- J Indicates an estimated values. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but, the result is less than the sample quantitation limit but greater than zero. The sample quantitation limit must be adjusted for both dilution and percent moisture.

- B This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action. This flag must be used for a TIC as well as for a positively identified TCL compound.

- E This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. If one or more compounds have a response greater than full scale, the sample or extract must be diluted and re-analyzed.

- D This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample, and all concentration values reported on that Form I are flagged with the "D" flag.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: OBG LABORATORIES, INC.

Contract: 3435.001.100

TP-2
Test Pit
Sub Sample

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL

Lab Sample ID: I3589

Sample wt/vol: 4.0 (g/mL) g

Lab File ID: >V2322

Level: (low/med) MED

Date Received: 04/14/89

% Moisture: not dec. 61

Date Analyzed: 04/18/89

Column: (pack/cap) PACK

Dilution Factor: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/kg Q

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>ug/kg</u>	Q
74-87-3	Chloromethane	3300.	U
74-83-9	Bromomethane		
75-01-4	Vinyl Chloride		
75-00-3	Chloroethane		
75-09-2	Methylene Chloride	1600.	
67-64-1	Acetone	3300.	
75-15-0	Carbon Disulfide	1600.	
75-35-4	1,1-Dichloroethene		
75-34-3	1,1-Dichloroethane		
540-59-0	1,2-Dichloroethene (total)		
67-66-3	Chloroform	190.	J
107-06-2	1,2-Dichloroethane	1600.	U
78-93-3	2-Butanone	1900.	JB
71-55-6	1,1,1-Trichloroethane	1600.	U
56-23-5	Carbon Tetrachloride	1600.	
108-05-4	Vinyl Acetate	3300.	
75-27-4	Bromodichloromethane	1600.	
78-87-5	1,2-Dichloropropane		
10061-01-5	cis-1,3-Dichloropropene		
79-01-6	Trichloroethene		
124-48-1	Dibromochloromethane		
79-00-5	1,1,2-Trichloroethane		
71-43-2	Benzene	250.	J
10061-02-6	trans-1,3-Dichloropropene	1600.	U
75-25-2	Bromoform	1600.	
108-10-1	4-Methyl-2-Pentanone	3300.	
591-78-6	2-Hexanone	3300.	
127-18-4	Tetrachloroethene	1600.	
79-34-5	1,1,2,2-Tetrachloroethane	1600.	
108-88-3	Toluene	260.	J
108-90-7	Chlorobenzene	1600.	U
100-41-4	Ethylbenzene		U
100-42-5	Styrene		U
1330-20-7	Xylene (total)	300.	J

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TP2
Test Pit
Sub Sample

Lab Name: OBG LABORATORIES, INC Contract: 3435.001.100

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: I3589

Sample wt/vol: 4.0 (g/mL) G Lab File ID: >V2322

Level: (low/med) MED Date Received: 04/14/89

† Moisture: not dec. 61 Date Analyzed: 04/18/89

Column: (pack/cap) PACK Dilution Factor: 1

Number TICs found: 0

CONCENTRATION UNITS:
 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: OBG LABORATORIES, INC.

Contract: 3435.001.100

TP-3
Test Pit
Sub Sample

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL

Lab Sample ID: I3590

Sample wt/vol: 4.0 (g/mL) g

Lab File ID: >V2323

Level: (low/med) MED

Date Received: 04/14/89

% Moisture: not dec. 48

Date Analyzed: 04/18/89

Column: (pack/cap) PACK

Dilution Factor: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/kg

CAS NO.

COMPOUND

Q

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>ug/kg</u>	Q
74-87-3	Chloromethane	2400.	U
74-83-9	Bromomethane		
75-01-4	Vinyl Chloride		
75-00-3	Chloroethane	↓	↓
75-09-2	Methylene Chloride	220.	J
67-64-1	Acetone	1600.	J
75-15-0	Carbon Disulfide	1200.	U
75-35-4	1,1-Dichloroethene		
75-34-3	1,1-Dichloroethane		
540-59-0	1,2-Dichloroethene (total)	↓	↓
67-66-3	Chloroform	140.	J
107-06-2	1,2-Dichloroethane	1200.	U
78-93-3	2-Butanone	1300.	JB
71-55-6	1,1,1-Trichloroethane	1200.	U
56-23-5	Carbon Tetrachloride	1200.	
108-05-4	Vinyl Acetate	2400.	
75-27-4	Bromodichloromethane	1200.	
78-87-5	1,2-Dichloropropane		
10061-01-5	cis-1,3-Dichloropropane		
79-01-6	Trichloroethene		
124-48-1	Dibromochloromethane		
79-00-5	1,1,2-Trichloroethane		
71-43-2	Benzene		
10061-02-6	trans-1,3-Dichloropropane	↓	
75-25-2	Bromoform	↓	
108-10-1	4-Methyl-2-Pentanone	2400.	
591-78-6	2-Hexanone	2400.	
127-18-4	Tetrachloroethene	1200.	
79-34-5	1,1,2,2-Tetrachloroethane	1200.	√
108-88-3	Toluene	2200.	
108-90-7	Chlorobenzene	1200.	U
100-41-4	Ethylbenzene	4400.	
100-42-5	Styrene	1200.	U
1330-20-7	Xylene (total)	18000.	

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name: OBG LABORATORIES, INC. Contract: 3435.001.100

TP3
 Test #1
 Sun Sample

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: I3500

Sample wt/vol: 4.0 (g/mL) G Lab File ID: >V2323

Level: (low/med) MED Date Received: 04-28-80

% Moisture: not dec. 48 Date Analyzed: 04-28-80

Column: (pack/cap) PACK Dilution Factor: _____

Number TICs found: 8

CONCENTRATION UNITS:
 (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	24.58	5600	J
2.	UNKNOWN HYDROCARBON	30.39	4700	J
3.	103651 BENZENE, PROPYL	30.67	4900	J
4.	271896 BENZOFURAN	31.92	6800	J
5.	UNKNOWN	33.41	22000	J
6.	BENZENE ETHYL METHYL ISOMER	34.50	24000	J
7.	UNKNOWN C10H14	37.37	5400	J
8.	UNKNOWN C9H8	39.11	13000	J
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: OBG LABORATORIES, INC.

Contract: 3435.001.100

TP-4
Test Pit
Sub Sample

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL

Lab Sample ID: I3591RE

Sample wt/vol: 4.0 (g/mL) g

Lab File ID: >V2330

Level: (low/med) MED

Date Received: 04/14/89

% Moisture: not dec. 49

Date Analyzed: 04/19/89

Column: (pack/cap) PACK

Dilution Factor: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) µg/kg Q

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>µg/kg</u>	Q
74-87-3	Chloromethane	2400.	U
74-83-9	Bromomethane	2400.	U
75-01-4	Vinyl Chloride	570.	J
75-00-3	Chloroethane	2400.	U
75-09-2	Methylene Chloride	1200.	U
67-64-1	Acetone	2400.	U
75-15-0	Carbon Disulfide	1200.	U
75-35-4	1,1-Dichloroethene	↓	U
75-34-3	1,1-Dichloroethane	↓	U
540-59-0	1,2-Dichloroethane (total)	290.	U
67-66-3	Chloroform	220.	J
107-06-2	1,2-Dichloroethane	1200.	U
78-93-3	2-Butanone	980.	J
71-55-6	1,1,1-Trichloroethane	1200.	U
56-23-5	Carbon Tetrachloride	1200.	↓
108-05-4	Vinyl Acetate	2400.	↓
75-27-4	Bromodichloromethane	1200.	↓
78-87-5	1,2-Dichloropropane	↓	↓
10061-01-5	cis-1,3-Dichloropropene	↓	↓
79-01-6	Trichloroethene	↓	↓
124-48-1	Dibromochloromethane	↓	↓
79-00-5	1,1,2-Trichloroethane	↓	↓
71-43-2	Benzene	↓	↓
10061-02-6	trans-1,3-Dichloropropene	↓	↓
75-25-2	Bromoform	↓	↓
108-10-1	4-Methyl-2-Pentanone	2400.	↓
591-78-6	2-Hexanone	2400.	↓
127-18-4	Tetrachloroethene	880.	J
79-34-5	1,1,2,2-Tetrachloroethane	1200.	U
108-88-3	Toluene	260.	J
108-90-7	Chlorobenzene	1200.	U
100-41-4	Ethylbenzene	↓	↓
100-42-5	Styrene	↓	↓
1330-20-7	Xylene (total)	330.	J

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name: ORG LABORATORIES, INC. Contract: 3435.001.100

TP4 Test P.t Sub S. mple

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: I3591RE

Sample wt/vol: 4.0 (g/mL) g Lab File ID: >V2330

Level: (low/med) MED Date Received: 04/14/89

% Moisture: not dec. 49 Date Analyzed: 04/19/89

Column: (pack/cap) PACK Dilution Factor: 1

Number TICs found: 0

CONCENTRATION UNITS:
 (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TP-5
Test Pit
Sub Sample

Lab Name: OBG LABORATORIES, INC. Contract: 3435.001.100

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: I3592

Sample wt/vol: 4.0 (g/mL) g Lab File ID: >V2333

Level: (low/med) MED Date Received: 04/14/89

Moisture: not dec. 46 Date Analyzed: 04/19/89

Column: (pack/cap) PACK Dilution Factor: 1

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/kg Q

74-87-3	Chloromethane	2300.	U
74-83-9	Bromomethane		
75-01-4	Vinyl Chloride		
75-00-3	Chloroethane		
75-09-2	Methylene Chloride	1200.	✓
67-64-1	Acetone	1300.	J
75-15-0	Carbon Disulfide	1200.	U
75-35-4	1,1-Dichloroethene		
75-34-3	1,1-Dichloroethane		
540-59-0	1,2-Dichloroethene (total)		
67-66-3	Chloroform		
107-06-2	1,2-Dichloroethane		✓
78-93-3	2-Butanone	1200.	J
71-55-6	1,1,1-Trichloroethane	1200.	U
56-23-5	Carbon Tetrachloride	1200.	
108-05-4	Vinyl Acetate	2300.	
75-27-4	Bromodichloromethane	1200.	
78-87-5	1,2-Dichloropropane		
10061-01-5	cis-1,3-Dichloropropene		
79-01-6	Trichloroethene		
124-48-1	Dibromochloromethane		
79-00-5	1,1,2-Trichloroethane		✓
71-43-2	Benzene	140.	J
10061-02-6	trans-1,3-Dichloropropene	1200.	U
75-25-2	Bromoform	1200.	
108-10-1	4-Methyl-2-Pentanone	2300.	
591-78-6	2-Hexanone	2300.	
127-18-4	Tetrachloroethene	1200.	
79-34-5	1,1,2,2-Tetrachloroethane		
108-88-3	Toluene		
108-90-7	Chlorobenzene		
100-41-4	Ethylbenzene		
100-42-5	Styrene		
1330-20-7	Xylene (total)		✓

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TP5
Test Pit
Sub Sample

Lab Name: OBG LABORATORIES, INC. Contract: 3435.001.100

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: I3592

Sample wt/vol: 4.0 (g/mL) G Lab File ID: >V2333

Level: (low/med) MED Date Received: 04/14/89

‡ Moisture: not dec. 46 Date Analyzed: 04/19/89

Column: (pack/cap) PACK Dilution Factor: 1

Number TICs found: 0

CONCENTRATION UNITS:
 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: OBG LABORATORIES, INC.

Contract: 3435.001.100

TP-6
Test Pit
Sub Sample

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL

Lab Sample ID: I3593

Sample wt/vol: 4.0 (g/mL) g

Lab File ID: >V2334

Level: (low/med) Med.

Date Received: 04/14/89

% Moisture: not dec. 46

Date Analyzed: 04/19/89

Column: (pack/cap) PACK

Dilution Factor: 1

CAS NO. COMPOUND CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/kg Q

74-87-3	Chloromethane	2300.	U
74-83-9	Bromomethane		
75-01-4	Vinyl Chloride		
75-00-3	Chloroethane	↓	
75-09-2	Methylene Chloride	260.	J
67-64-1	Acetone	2300.	U
75-15-0	Carbon Disulfide	1200.	
75-35-4	1,1-Dichloroethene		
75-34-3	1,1-Dichloroethane		
540-59-0	1,2-Dichloroethane (total)		
67-66-3	Chloroform		
107-06-2	1,2-Dichloroethane	↓	
78-93-3	2-Butanone	2300.	
71-55-6	1,1,1-Trichloroethane	1200.	
56-23-5	Carbon Tetrachloride	1200.	
108-05-4	Vinyl Acetate	2300.	
75-27-4	Bromodichloromethane	1200.	
78-87-5	1,2-Dichloropropane		
10061-01-5	cis-1,3-Dichloropropene		
79-01-6	Trichloroethane		
124-48-1	Dibromochloromethane		
79-00-5	1,1,2-Trichloroethane		
71-43-2	Benzene		
10061-02-6	trans-1,3-Dichloropropene		
75-25-2	Bromoform	↓	
108-10-1	4-Methyl-2-Pentanone	2300.	
591-78-6	2-Hexanone	2300.	
127-18-4	Tetrachloroethene	1200.	
79-34-5	1,1,2,2-Tetrachloroethane	1200.	↓
108-88-3	Toluene	1200.	
108-90-7	Chlorobenzene	1200.	U
100-41-4	Ethylbenzene	2400.	
100-42-5	Styrene	1200.	U
1330-20-7	Xylene (total)	7500.	

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TP6
Test Pit
Sub Sample

Lab Name: OBG LABORATORIES, INC. Contract: 3435.001.100

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: I3593

Sample wt/vol: 4.0 (g/mL) g Lab File ID: >V2334

Level: (low/med) MED Date Received: 04/14/89

† Moisture: not dec. 46 Date Analyzed: 04/19/89

Column: (pack/cap) PACK Dilution Factor: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

Number TICs found: 10

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	C9H16 HYDROCARBON	25.00	7200	J
2.	CYCLOHEXANE ETHYL METHYL ISOM	26.16	4300	J
3.	UNKNOWN HYDROCARBON	26.84	4800	J
4.	UNKNOWN HYDROCARBON	30.33	39000	J
5.	UNKNOWN	31.92	7500	J
6.	UNKNOWN	33.42	19000	J
7.	UNKNOWN	34.44	42000	J
8.	UNKNOWN	36.34	19000	J
9.	UNKNOWN HYDROCARBON	38.43	22000	J
10.	UNKNOWN	38.99	39000	J
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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: OBG LABORATORIES, INC.

Contract: 3435.001.100

TP-2

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL

Lab Sample ID: I3589DL

Sample wt/vol: 29.9 (g/mL) g

Lab File ID: >SA937

Level: (low/med) LOW

Date Received: 04/14/89

Moisture: not dec. 61 dec. _____

Date Extracted: 04/17/89

Extraction: (SepF/Cont/Sonc) _____

Date Analyzed: 04/18/89

GPC Cleanup: (Y/N) N pH: 6.8

Dilution Factor: 10

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/kg Q

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>ug/kg</u>	Q
108-95-2	Phenol	11000.	D
111-44-4	bis(2-Chloroethyl) ether	8600.	U
95-57-8	2-Chlorophenol		
541-73-1	1,3-Dichlorobenzene		
106-46-7	1,4-Dichlorobenzene		
100-51-6	Benzyl alcohol		
95-50-1	1,2-Dichlorobenzene	↓	↓
95-48-7	2-Methylphenol	15000.	D
108-60-1	bis(2-Chloroisopropyl) ether	8600.	U
106-44-5	4-Methylphenol	57000.	D
621-64-7	N-Nitroso-di-n-propylamine	8600.	U
67-72-1	Hexachloroethane		
98-95-3	Nitrobenzene		
78-59-1	Isophorone		
88-75-5	2-Nitrophenol	↓	↓
105-67-9	2,4-Dimethylphenol	41000.	D
65-85-0	Benzoic acid	42000.	U
111-91-1	bis(2-Chloroethoxy) methane	8600.	U
120-83-2	2,4-Dichlorophenol		
120-82-1	1,2,4-Trichlorobenzene	↓	↓
91-20-3	Naphthalene	3700.	DJ
106-47-8	4-Chloroaniline	8600.	U
87-68-3	Hexachlorobutadiene		
59-50-7	4-Chloro-3-methylphenol		
91-57-6	2-Methylnaphthalene		
77-47-4	Hexachlorocyclopentadiene		
88-06-2	2,4,6-Trichlorophenol	↓	↓
95-95-4	2,4,5-Trichlorophenol	42000.	U
91-58-7	2-Chloronaphthalene	8600.	U
88-74-4	2-Nitroaniline	42000.	U
131-11-3	Dimethylphthalate	8600.	U
208-96-8	Acenaphthylene		
606-20-2	2,6-Dinitrotoluene	↓	↓

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

DATA SAMPLE NO.

Lab Name: OBG LABORATORIES, INC. Contract: 3435.001.100

TP-2

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: I3589DL

Sample wt/vol: 29.9 (g/mL) g Lab File ID: >SA937

Level: (low/med) LOW Date Received: 04/14/89

% Moisture: not dec. 61 dec. _____ Date Extracted: 04/17/89

Extraction: (SepF/Cont/Sonc) _____ Date Analyzed: 04/18/89

GPC Cleanup: (Y/N) N pH: 6.8 Dilution Factor: 10

CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg Q

99-09-2-----	3-Nitroaniline	42000.	U
83-32-9-----	Acenaphthene	8600.	U
51-28-5-----	2,4-Dinitrophenol	42000.	U
100-02-7-----	4-Nitrophenol	42000.	U
132-64-9-----	Dibenzofuran	1800.	DJ
121-14-2-----	2,4-Dinitrotoluene	8600.	U
84-66-2-----	Diethylphthalate		
7005-72-3-----	4-Chlorophenyl-phenylether	↓	↓
86-73-7-----	Fluorene	1800.	DJ
100-01-6-----	4-Nitroaniline	42000.	U
534-52-1-----	4,6-Dinitro-2-methylphenol	42000.	U
86-30-6-----	N-Nitrosodiphenylamine (1)	8600.	U
101-55-3-----	4-Bromophenyl-phenylether		
118-74-1-----	Hexachlorobenzene	↓	↓
87-86-5-----	Pentachlorophenol	42000.	U
85-01-3-----	Phenanthrene	2400.	DJ
120-12-7-----	Anthracene	680.	DJ
84-74-2-----	Di-n-butylphthalate	8600.	U
206-44-0-----	Fluoranthene	1400.	D
129-00-0-----	Pyrene	1800.	D
85-68-7-----	Butylbenzylphthalate	8600.	U
91-94-1-----	3,3'-Dichlorobenzidine	17000.	U
56-55-3-----	Benzo(a)anthracene	8600.	U
218-01-9-----	Chrysene		
117-81-7-----	bis(2-Ethylhexyl)phthalate		
117-84-0-----	Di-n-octylphthalate		
205-99-2-----	Benzo(b)fluoranthene		
207-08-9-----	Benzo(k)fluoranthene		
50-32-8-----	Benzo(a)pyrene		
193-39-5-----	Indeno(1,2,3-cd)pyrene		
53-70-3-----	Dibenz(a,h)anthracene		
191-24-2-----	Benzo(g,h,i)perylene	↓	↓

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TP-2

Lab Name: OBG LABORATORIES, INC. Contract: 3435.001.100

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: I 3589 DL

Sample wt/vol: 29.9 (g/mL) 5 Lab File ID: 251937

Level: (low/med) LOW Date Received: 04/14/89

Moisture: not dec. 61 dec. _____ Date Extracted: 04/17/89

Extraction: (SepF/Cont/Sonc) _____ Date Analyzed: 04/18/89

GPC Cleanup: (Y/N) N pH: 6.8 Dilution Factor: 10

CONCENTRATION UNITS:

Number TICs found: 30 (ug/L or ug/Kg) ug/kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	4.43	82,000	JD
2.	1120725 CYCLOPENTANONE, 2-METHYL-	5.37	7000	
3.	UNKNOWN	5.50	46,000	
4.	"	9.71	18,000	
5.	BENZOFURAN, -METHYL- (ISOMER)	10.92	5200	
6.	UNKNOWN	11.57	7000	
7.	526750 PHENOL, 2,3-DIMETHYL-	12.14	48,000	
8.	UNKNOWN	12.52	14,000	
9.	PHENOL -TRIMETHYL- (ISOMER)	12.66	7200	
10.	1849846 1H-BENZIMIDAZOLE, 2-ETHYL-	12.83	6700	
11.	UNKNOWN C9 HYDROCARBON	13.23	12,000	
12.	3953763 PHENOL 2-ETHYL-4-METHYL-	13.53	33,000	
13.	496186 PHENOL 2,4,5-TRIMETHYL-	13.69	7200	
14.	PHENOL -TRIMETHYL- (ISOMER)	13.76	5400	
15.	UNKNOWN	14.36	5800	
16.	"	14.55	8500	
17.	"	23.25	13,000	
18.	"	23.29	52,000	
19.	"	33.45	56,000	
20.	"	34.02	53,000	JD
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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: OBG LABORATORIES, INC. Contract: 3435.001.100

TP-3

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: I3590DL2

Sample wt/vol: 30.2 (g/mL) g Lab File ID: >B0395

Level: (low/med) LOW Date Received: 04/14/89

Moisture: not dec. 48 dec. _____ Date Extracted: 04/17/89

Extraction: (SepF/Cont/Sonc) _____ Date Analyzed: 04/26/89

GPC Cleanup: (Y/N) N pH: 6.8 Dilution Factor: 100

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/kg Q

108-95-2-----	Phenol	120000.	D
111-44-4-----	bis(2-Chloroethyl) ether	63000.	U
95-57-8-----	2-Chlorophenol		
541-73-1-----	1,3-Dichlorobenzene		
106-46-7-----	1,4-Dichlorobenzene		
100-51-6-----	Benzyl alcohol		
95-50-1-----	1,2-Dichlorobenzene	↓	↓
95-48-7-----	2-Methylphenol	120000.	D
108-60-1-----	bis(2-Chloroisopropyl) ether	63000.	U
106-44-5-----	4-Methylphenol	240000.	D
621-64-7-----	N-Nitroso-di-n-propylamine	63000.	U
67-72-1-----	Hexachloroethane		
98-95-3-----	Nitrobenzene		
78-59-1-----	Isophorone		
88-75-5-----	2-Nitrophenol	↓	↓
105-67-9-----	2,4-Dimethylphenol	120000.	D
65-85-0-----	Benzoic acid	300000.	U
111-91-1-----	bis(2-Chloroethoxy)methane	63000.	
120-83-2-----	2,4-Dichlorophenol		
120-82-1-----	1,2,4-Trichlorobenzene	↓	↓
91-20-3-----	Naphthalene	20000.	JD
106-47-8-----	4-Chloroaniline	63000.	U
87-68-3-----	Hexachlorobutadiene	↓	↓
59-50-7-----	4-Chloro-3-methylphenol	↓	↓
91-57-6-----	2-Methylnaphthalene	42000.	JD
77-47-4-----	Hexachlorocyclopentadiene	63000.	U
88-06-2-----	2,4,6-Trichlorophenol	63000.	U
95-95-4-----	2,4,5-Trichlorophenol	300000.	U
91-58-7-----	2-Chloronaphthalene	63000.	U
88-74-4-----	2-Nitroaniline	300000.	U
131-11-3-----	Dimethylphthalate	63000.	U
208-96-8-----	Acenaphthylene		
606-20-2-----	2,6-Dinitrotoluene	↓	↓

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

TP-3

Lab Name: OBG LABORATORIES, INC. Contract: 3435.001.100
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____
 Matrix: (soil/water) SOIL Lab Sample ID: I3590DL2
 Sample wt/vol: 30.2 (g/mL) g Lab File ID: >B0395
 Level: (low/med) LOW Date Received: 04/14/89
 % Moisture: not dec. 48 dec. _____ Date Extracted: 04/17/89
 Extraction: (SepF/Cont/Sonc) _____ Date Analyzed: 04/26/89
 GPC Cleanup: (Y/N) N pH: 6.8 Dilution Factor: 100

CAS NO. COMPOUND CONCENTRATION UNITS:
 (ug/L or ug/Kg) ug/kg Q

99-09-2-----	3-Nitroaniline	300000.	U
83-32-9-----	Acenaphthene	63000.	U
51-28-5-----	2,4-Dinitrophenol	300000.	U
100-02-7-----	4-Nitrophenol	300000.	U
132-64-9-----	Dibenzofuran	63000.	U
121-14-2-----	2,4-Dinitrotoluene		
84-66-2-----	Diethylphthalate		
7005-72-3-----	4-Chlorophenyl-phenylether		
86-73-7-----	Fluorene	↓	↓
100-01-6-----	4-Nitroaniline	300000	U
534-52-1-----	4,6-Dinitro-2-methylphenol	300000	U
86-30-6-----	N-Nitrosodiphenylamine (1)	63000	U
101-55-3-----	4-Bromophenyl-phenylether		
118-74-1-----	Hexachlorobenzene	↓	↓
87-86-5-----	Pentachlorophenol	300000	U
85-01-8-----	Phenanthrene	14000	U
120-12-7-----	Anthracene	63000.	U
84-74-2-----	Di-n-butylphthalate		
206-44-0-----	Fluoranthene		
129-00-0-----	Pyrene		
85-68-7-----	Butylbenzylphthalate	↓	↓
91-94-1-----	3,3'-Dichlorobenzidine	130000	U
56-55-3-----	Benzo(a)anthracene	63000.	U
218-01-9-----	Chrysene		
117-81-7-----	bis(2-Ethylhexyl)phthalate		
117-84-0-----	Di-n-octylphthalate		
205-99-2-----	Benzo(b)fluoranthene		
207-08-9-----	Benzo(k)fluoranthene		
50-32-8-----	Benzo(a)pyrene		
193-39-5-----	Indeno(1,2,3-cd)pyrene		
53-70-3-----	Dibenz(a,h)anthracene		
191-24-2-----	Benzo(g,h,i)perylene	↓	↓

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TP3

Lab Name: OBG LABORATORIES, INC. Contract: 3435.001.100

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: I3590DL2

Sample wt/vol: 30.2 (g/mL) g Lab File ID: >B0395

Level: (low/med) LOW Date Received: 04/14/89

Moisture: not dec. 48 dec. _____ Date Extracted: 04/17/89

Extraction: (SepF/Cont/Sonc) _____ Date Analyzed: 04/26/89

GPC Cleanup: (Y/N) N pH: 6.8 Dilution Factor: 100

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

Number TICs found: 20

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.56	600,000	JD
2.	"	11.99	11,000	
3.	PHENOL - ETHYL - (ISOMER)	13.39	81,000	
4.	UNKNOWN	13.79	56,000	
5.	UNKNOWN C9H12O	13.98	33,000	
6.	UNKNOWN	14.84	63,000	
7.	"	15.17	49,000	
8.	91121 PHENOL, 2,6-DIMETHOXY-	16.23	76,000	
9.	UNKNOWN	17.55	23,000	
10.	UNKNOWN C13H14	19.04	31,000	
11.	UNKNOWN HYDROCARBON	20.73	35,000	
12.	"	20.81	31,000	
13.	"	22.95	50,000	
14.	"	24.02	49,000	
15.	"	25.01	690,000	
16.	"	25.97	64,000	
17.	"	26.57	59,000	
18.	"	27.71	74,000	
19.	"	27.75	56,000	
20.	"	29.09	66,000	↓V
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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: OBG LABORATORIES, INC. Contract: 3435.001.100

TP-4

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: I3591DL

Sample wt/vol: 30.0 (g/mL) g Lab File ID: >SA940

Level: (low/med) LOW Date Received: 04/14/89

Moisture: not dec. 49 dec. _____ Date Extracted: 04/17/89

Extraction: (SepF/Cont/Sonc) _____ Date Analyzed: 04/18/89

GPC Cleanup: (Y/N) N pH: 6.5 Dilution Factor: 10

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/kg Q

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>ug/kg</u>	Q
108-95-2	Phenol	6700.	JD
111-44-4	bis(2-Chloroethyl) ether	6800.	U
95-57-8	2-Chlorophenol		
541-73-1	1,3-Dichlorobenzene		
106-46-7	1,4-Dichlorobenzene		
100-51-6	Benzyl alcohol		
95-50-1	1,2-Dichlorobenzene	↓	↓
95-48-7	2-Methylphenol	8200.	D
108-60-1	bis(2-Chloroisopropyl) ether	6800.	U
106-44-5	4-Methylphenol	29000.	D
621-64-7	N-Nitroso-di-n-propylamine	6800.	U
67-72-1	Hexachloroethane		
98-95-3	Nitrobenzene		
78-59-1	Isophorone		
88-75-5	2-Nitrophenol	↓	↓
105-67-9	2,4-Dimethylphenol	16000.	D
65-85-0	Benzoic acid	34000.	U
111-91-1	bis(2-Chloroethoxy) methane	6800.	
120-83-2	2,4-Dichlorophenol		
120-82-1	1,2,4-Trichlorobenzene	↓	↓
91-20-3	Naphthalene	5700.	D
106-47-8	4-Chloroaniline	6800.	U
87-68-3	Hexachlorobutadiene		
59-50-7	4-Chloro-3-methylphenol	↓	↓
91-57-6	2-Methylnaphthalene	12000.	D
77-47-4	Hexachlorocyclopentadiene	6800.	U
88-06-2	2,4,6-Trichlorophenol	↓	
95-95-4	2,4,5-Trichlorophenol	34000.	
91-58-7	2-Chloronaphthalene	6800.	
88-74-4	2-Nitroaniline		
131-11-3	Dimethylphthalate		
208-96-8	Acenaphthylene		
606-20-2	2,6-Dinitrotoluene	↓	↓

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: OBG LABORATORIES, INC. Contract: 3435.001.100

TP-4

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: I3591DL

Sample wt/vol: 30.0 (g/mL) g Lab File ID: >SA940

Level: (low/med) LOW Date Received: 04/14/89

% Moisture: not dec. 49 dec. _____ Date Extracted: 04/17/89

Extraction: (SepF/Cont/Sonc) _____ Date Analyzed: 04/18/89

GPC Cleanup: (Y/N) N pH: 6.5 Dilution Factor: 10

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/kg Q

99-09-2-----3-Nitroaniline	34000.	U
83-32-9-----Acanaphthene	6800.	
51-28-5-----2,4-Dinitrophenol	34000.	
100-02-7-----4-Nitrophenol	↓	↓
132-64-9-----Dibenzofuran	5700.	JD
121-14-2-----2,4-Dinitrotoluene	6800.	U
84-66-2-----Diethylphthalate	↓	↓
7005-72-3-----4-Chlorophenyl-phenylether	↓	↓
86-73-7-----Fluorene	5500.	JD
100-01-6-----4-Nitroaniline	34000.	U
534-52-1-----4,6-Dinitro-2-methylphenol	↓	
86-30-6-----N-Nitrosodiphenylamine (1)	6800.	
101-55-3-----4-Bromophenyl-phenylether	↓	
118-74-1-----Hexachlorobenzene	↓	
87-86-5-----Pentachlorophenol	34000.	↓
85-01-8-----Phenanthrene	6300.	JD
120-12-7-----Anthracene	1600.	JD
84-74-2-----Di-n-butylphthalate	6800.	U
206-44-0-----Fluoranthene	2000.	D
129-00-0-----Pyrene	4400.	JD
85-68-7-----Butylbenzylphthalate	6800.	U
91-94-1-----3,3'-Dichlorobenzidine	14000.	
56-55-3-----Benzo(a)anthracene	6800.	
218-01-9-----Chrysene		
117-81-7-----bis(2-Ethylhexyl)phthalate		
117-84-0-----Di-n-octylphthalate		
205-99-2-----Benzo(b)fluoranthene		
207-08-9-----Benzo(k)fluoranthene		
50-32-8-----Benzo(a)pyrene		
193-39-5-----Indeno(1,2,3-cd)pyrene		
53-70-3-----Dibenz(a,h)anthracene		
191-24-2-----Benzo(g,h,i)perylene	↓	↓

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TP-4

Lab Name: OBG LABORATORIES, INC. Contract: 3435.001.100

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: J3591DL

Sample wt/vol: 30.0 (g/mL) g Lab File ID: >3A947

Level: (low/med) LOW Date Received: 04/14/89

Moisture: not dec. 49 dec. _____ Date Extracted: 04/17/89

Extraction: (SepF/Cont/Sonc) _____ Date Analyzed: 04/18/89

GPC Cleanup: (Y/N) N pH: 6.5 Dilution Factor: 10

CONCENTRATION UNITS:

Number TICs found: 20 (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN HYDROCARBON	4.45	89,000	JD
2.	UNKNOWN	5.53	45,000	
3.	"	10.33	6,100	
4.	"	10.44	8,300	
5.	PHENOL - DIMETHYL - (ISOMER)	12.11	9,400	
6.	UNKNOWN	13.56	15,000	
7.	"	14.37	13,000	
8.	"	14.39	7,500	
9.	UNKNOWN HYDROCARBON	15.62	8,100	
10.	NAPHTHALENE - DIMETHYL - (ISOMER)	15.75	8,100	
11.	NAPHTHALENE - DIMETHYL - (ISOMER)	15.96	11,000	
12.	NAPHTHALENE - DIMETHYL - (ISOMER)	16.24	6,300	
13.	UNKNOWN	16.29	7,600	
14.	UNKNOWN HYDROCARBON	16.97	6,800	
15.	NAPHTHALENE - TRIMETHYL - (ISOMER)	17.97	7,900	
16.	UNKNOWN HYDROCARBON	19.41	9,200	
17.	UNKNOWN CIS HIG	19.94	10,000	
18.	UNKNOWN HYDROCARBON	21.60	8,400	
19.	"	22.64	11,000	
20.	"	23.60	3,500	✓✓
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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TP-5

Lab Name: OBG LABORATORIES, INC. Contract: 3435.001.100

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: I3592DL

Sample wt/vol: 30.2 (g/mL) g Lab File ID: >SA939

Level: (low/med) LOW Date Received: 04/14/89

Moisture: not dec. 46 dec. _____ Date Extracted: 04/17/89

Extraction: (SepF/Cont/Sonc) _____ Date Analyzed: 04/18/89

GPC Cleanup: (Y/N) N pH: 6.8 Dilution Factor: 10

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/kg Q

CAS NO.	COMPOUND	(ug/L or ug/Kg)	ug/kg	Q
108-95-2	Phenol	6100.		U
111-44-4	bis(2-Chloroethyl) ether			
95-57-8	2-Chlorophenol			
541-73-1	1,3-Dichlorobenzene			
106-46-7	1,4-Dichlorobenzene			
100-51-6	Benzyl alcohol			
95-50-1	1,2-Dichlorobenzene			
95-48-7	2-Methylphenol			
108-60-1	bis(2-Chloroisopropyl) ether			
106-44-5	4-Methylphenol			
621-64-7	N-Nitroso-di-n-propylamine			
67-72-1	Hexachloroethane			
98-95-3	Nitrobenzene			
78-59-1	Isophorone			
88-75-5	2-Nitrophenol			
105-67-9	2,4-Dimethylphenol	19000.		D
65-85-0	Benzoic acid	30000.		U
111-91-1	bis(2-Chloroethoxy)methane	6100.		U
120-83-2	2,4-Dichlorophenol			
120-82-1	1,2,4-Trichlorobenzene			
91-20-3	Naphthalene	1800.		DJ
106-47-8	4-Chloroaniline	6100.		U
87-68-3	Hexachlorobutadiene			
59-50-7	4-Chloro-3-methylphenol			
91-57-6	2-Methylnaphthalene			
77-47-4	Hexachlorocyclopentadiene			
88-06-2	2,4,6-Trichlorophenol			
95-95-4	2,4,5-Trichlorophenol	30000.		U
91-58-7	2-Chloronaphthalene	6100.		U
88-74-4	2-Nitroaniline	30000.		U
131-11-3	Dimethylphthalate	6100.		U
208-96-8	Acenaphthylene			
606-20-2	2,6-Dinitrotoluene			

RL

Lab Name: OBG LABORATORIES, INC. Contract: 3435.001.100

TP-5

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: I3592DL

Sample wt/vol: 30.2 (g/mL) g Lab File ID: >SA939

Level: (low/med) LOW Date Received: 04/14/89

% Moisture: not dec. 46 dec. _____ Date Extracted: 04/17/89

Extraction: (SepF/Cont/Sonc) _____ Date Analyzed: 04/18/89

GPC Cleanup: (Y/N) N pH: 6.8 Dilution Factor: 10

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/kg Q

99-09-2-----	3-Nitroaniline	30000.	U
83-32-9-----	Acenaphthene	6100.	U
51-28-5-----	2,4-Dinitrophenol	30000.	U
100-02-7-----	4-Nitrophenol	30000.	U
132-64-9-----	Dibenzofuran	6100.	U
121-14-2-----	2,4-Dinitrotoluene		
84-66-2-----	Diethylphthalate		
7005-72-3-----	4-Chlorophenyl-phenylether		
86-73-7-----	Fluorene	↓	↓
100-01-6-----	4-Nitroaniline	30000.	U
534-52-1-----	4,6-Dinitro-2-methylphenol	30000.	U
86-30-6-----	N-Nitrosodiphenylamine (1)	6100.	U
101-55-3-----	4-Bromophenyl-phenylether		
118-74-1-----	Hexachlorobenzene	↓	↓
87-86-5-----	Pentachlorophenol	30000.	U
85-01-8-----	Phenanthrene	920.	JD
120-12-7-----	Anthracene	6100.	U
84-74-2-----	Di-n-butylphthalate	↓	↓
206-44-0-----	Fluoranthene	540.	JD
129-00-0-----	Pyrene	650.	JD
85-68-7-----	Butylbenzylphthalate	6100.	U
91-94-1-----	3,3'-Dichlorobenzidine	12000.	U
56-55-3-----	Benzo(a)anthracene	6100.	U
218-01-9-----	Chrysene		
117-81-7-----	bis(2-Ethylhexyl)phthalate		
117-84-0-----	Di-n-octylphthalate		
205-99-2-----	Benzo(b)fluoranthene		
207-08-9-----	Benzo(k)fluoranthene		
50-32-8-----	Benzo(a)pyrene		
193-39-5-----	Indeno(1,2,3-cd)pyrene		
53-70-3-----	Dibenz(a,h)anthracene		
191-24-2-----	Benzo(g,h,i)perylene	↓	↓

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TP-5

Lab Name: OBG LABORATORIES, INC. Contract: 3435.001.100

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: I 3592 DL

Sample wt/vol: 30.2 (g/mL) g Lab File ID: >52939

Level: (low/med) Low Date Received: 04/14/89

Moisture: not dec. 46 dec. _____ Date Extracted: 04/17/89

Extraction: (SepF/Cont/Sonc) _____ Date Analyzed: 04/18/89

GPC Cleanup: (Y/N) N pH: 6.8 Dilution Factor: 10

CONCENTRATION UNITS:

Number TICs found: 20 (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	4.46	57,000	JD
2.	"	5.52	44,000	
3.	4971130 CYCLOPENTANONE, 2-ETHYL-	7.62	7400	
4.	UNKNOWN	9.69	21,000	
5.	UNKNOWN C8H12O	10.16	13,000	
6.	PHENOL, -DIMETHYL- (ISOMER)	12.15	31,000	
7.	PHENOL, -DIMETHYL- (ISOMER)	12.53	14,000	
8.	PHENOL, -TRIMETHYL (ISOMER)	12.68	12,000	
9.	PHENOL, -TRIMETHYL- (ISOMER)	13.12	5600	
10.	PHENOL, -1-(METHYLETHYL)-(ISO)	13.24	6500	
11.	UNKNOWN C9H12O	13.53	4300	
12.	PHENOL, -ETHYL- METHYL- (ISOMER)	13.61	21000	
13.	PHENOL, -TRIMETHYL- (ISOMER)	13.70	9200	
14.	PHENOL, -TRIMETHYL- (ISOMER)	13.79	12,000	
15.	UNKNOWN	13.86	6100	
16.	"	14.48	9900	
17.	"	14.91	13,000	
18.	"	14.98	5700	
19.	"	22.25	6200	
20.	"	23.32	10,000	↓ ↓
21.				
22.				
23.				
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26.				
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28.				
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30.				

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: OBG LABORATORIES, INC. Contract: 3435.001.100

TP-6

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: I3593DL

Sample wt/vol: 30.0 (g/mL) g Lab File ID: >SA938

Level: (low/med) LOW Date Received: 04/14/89

Moisture: not dec. 46 dec. _____ Date Extracted: 04/17/89

Extraction: (SepF/Cont/Sonc) _____ Date Analyzed: 04/18/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 10

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) µg/kg Q

108-95-2-----	Phenol	14000.	D
111-44-4-----	bis(2-Chloroethyl)ether	6100.	U
95-57-8-----	2-Chlorophenol		
541-73-1-----	1,3-Dichlorobenzene		
106-46-7-----	1,4-Dichlorobenzene		
100-51-6-----	Benzyl alcohol		
95-50-1-----	1,2-Dichlorobenzene		
95-48-7-----	2-Methylphenol		
108-60-1-----	bis(2-Chloroisopropyl)ether	↓	↓
106-44-5-----	4-Methylphenol	41000.	D
621-64-7-----	N-Nitroso-di-n-propylamine	6100.	U
67-72-1-----	Hexachloroethane		
98-95-3-----	Nitrobenzene		
78-59-1-----	Isophorone		
88-75-5-----	2-Nitrophenol	↓	↓
105-67-9-----	2,4-Dimethylphenol	29000.	D
65-85-0-----	Benzoic acid	30000.	U
111-91-1-----	bis(2-Chloroethoxy)methane	6100.	U
120-83-2-----	2,4-Dichlorophenol		
120-82-1-----	1,2,4-Trichlorobenzene	↓	↓
91-20-3-----	Naphthalene	6000.	DJ
106-47-8-----	4-Chloroaniline	6100.	U
87-68-3-----	Hexachlorobutadiene		
59-50-7-----	4-Chloro-3-methylphenol	↓	↓
91-57-6-----	2-Methylnaphthalene	8500.	D
77-47-4-----	Hexachlorocyclopentadiene	6100.	U
88-06-2-----	2,4,6-Trichlorophenol	↓	↓
95-95-4-----	2,4,5-Trichlorophenol	30000.	U
91-58-7-----	2-Chloronaphthalene	6100.	U
88-74-4-----	2-Nitroaniline	30000.	U
131-11-3-----	Dimethylphthalate	6100.	U
208-96-8-----	Acenaphthylene		
606-20-2-----	2,6-Dinitrotoluene	↓	↓

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TP-6

Lab Name: OBG LABORATORIES, INC. Contract: 3435.001.100

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) Soil Lab Sample ID: I3593DL

Sample wt/vol: 30.0 (g/mL) G Lab File ID: >SA938

Level: (low/med) LOW Date Received: 04/14/89

% Moisture: not dec. 46 dec. _____ Date Extracted: 04/17/89

Extraction: (SepF/Cont/Sonc) _____ Date Analyzed: 04/18/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 10

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) ug/kg Q

99-09-2-----	3-Nitroaniline	30000.	U
83-32-9-----	Acenaphthene	6100	U
51-28-5-----	2,4-Dinitrophenol	30000.	U
100-02-7-----	4-Nitrophenol	30000.	U
132-64-9-----	Dibenzofuran	6100	U
121-14-2-----	2,4-Dinitrotoluene		
84-66-2-----	Diethylphthalate		
7005-72-3-----	4-Chlorophenyl-phenylether		
86-73-7-----	Fluorene	↓	↓
100-01-6-----	4-Nitroaniline	30000.	U
534-52-1-----	4,6-Dinitro-2-methylphenol	30000.	U
86-30-6-----	N-Nitrosodiphenylamine (1)	6100	U
101-55-3-----	4-Bromophenyl-phenylether		
118-74-1-----	Hexachlorobenzene	↓	↓
87-86-5-----	Pentachlorophenol	30000.	U
85-01-8-----	Phenanthrene	1600.	DJ
120-12-7-----	Anthracene	6100.	U
84-74-2-----	Di-n-butylphthalate		
206-44-0-----	Fluoranthene		
129-00-0-----	Pyrene		
85-68-7-----	Butylbenzylphthalate	↓	↓
91-94-1-----	3,3'-Dichlorobenzidine	12000.	U
56-55-3-----	Benzo(a)anthracene	6100.	U
218-01-9-----	Chrysene		
117-81-7-----	bis(2-Ethylhexyl)phthalate		
117-84-0-----	Di-n-octylphthalate		
205-99-2-----	Benzo(b)fluoranthene		
207-08-9-----	Benzo(k)fluoranthene		
50-32-8-----	Benzo(a)pyrene		
193-39-5-----	Indeno(1,2,3-cd)pyrene		
53-70-3-----	Dibenz(a,h)anthracene		
191-24-2-----	Benzo(g,h,i)perylene	↓	↓

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TP-6

Lab Name: OBG LABORATORIES, INC.

Contract: 3435.001.100

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL

Lab Sample ID: IS-13 DL

Sample wt/vol: 30.0 (g/mL) g

Lab File ID: 252932

Level: (low/med) LOW

Date Received: 04/14/89

Moisture: not dec. 46 dec. _____

Date Extracted: 04/17/89

Extraction: (SepF/Cont/Sonc) _____

Date Analyzed: 04/18/89

GPC Cleanup: (Y/N) N pH: 7.0

Dilution Factor: 10

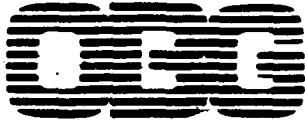
Number TICs found: 20

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. <u>141797</u>	<u>3-PENTEN-2-ONE, 4-METHYL</u>	<u>4.37</u>	<u>68,000</u>	<u>ID</u>
2.	<u>UNKNOWN</u>	<u>5.45</u>	<u>32,000</u>	
3. <u>52896874</u>	<u>HEPTANE, 4-(1-METHYLETHYL)-</u>	<u>7.73</u>	<u>20,000</u>	
4.	<u>UNKNOWN</u>	<u>7.99</u>	<u>16,000</u>	
5.	<u>"</u>	<u>8.20</u>	<u>18,000</u>	
6.	<u>"</u>	<u>8.40</u>	<u>20,000</u>	
7.	<u>"</u>	<u>9.40</u>	<u>20,000</u>	
8. <u>2847725</u>	<u>DECANE 4-METHYL</u>	<u>9.47</u>	<u>36,000</u>	
9.	<u>UNKNOWN</u>	<u>10.69</u>	<u>16,000</u>	
10.	<u>PHENOL -ETHYL - (ISOMER)</u>	<u>12.14</u>	<u>24,000</u>	
11.	<u>UNKNOWN</u>	<u>12.44</u>	<u>9,000</u>	
12.	<u>"</u>	<u>12.34</u>	<u>14,000</u>	
13.	<u>"</u>	<u>13.55</u>	<u>17,000</u>	
14.	<u>"</u>	<u>13.77</u>	<u>8,500</u>	
15. <u>1755899</u>	<u>PHENOL 4-METHYL-2-METHOXY-</u>	<u>13.87</u>	<u>11,000</u>	
16.	<u>NAPHTHALENE -METHYL - (ISOMER)</u>	<u>14.39</u>	<u>12,000</u>	
17. <u>101848</u>	<u>BENTEN-1,1-DIHYDRO-</u>	<u>15.71</u>	<u>24,000</u>	
18.	<u>NAPHTHALENE -DIMETHYL (ISOMER)</u>	<u>15.97</u>	<u>17,000</u>	
19.	<u>UNKNOWN HYDROCARBON</u>	<u>16.48</u>	<u>12,000</u>	
20.	<u>UNKNOWN HYDROCARBON</u>	<u>19.50</u>	<u>18,000</u>	<u>x</u>
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22.				
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SECTION 2

CHAIN OF CUSTODY



LABORATORIES, INC.

CHAIN OF CUSTODY RECORD

SURVEY CLIFFS-DOW	SAMPLERS: (Signature) S. KACZMAR
----------------------	-------------------------------------

STATION NUMBER	STATION LOCATION	DATE	TIME	SAMPLE TYPE		SEC. NO.	NO. OF CONTAINERS	ANALYSIS REQUIRED
				Method	Lot			
TP-2	TEST PIT SUB-SAMPLE	4/14/89	2:20				2	VOA/AE/BN (CLP)
TP-3	TEST PIT ^{SUB} SAMPLE	4/14/89	2:20				2	VOA/AE/BN-(CLP)
TP-4	TEST PIT SUBSAMPLE	4/14/89	2:20				2	VOA/AE-BN-CLP
TP-5	TEST PIT SUBSAMPLE	4/14/89	2:20				2	VOA/AE-BN-CLP
TP-6	TEST PIT SUBSAMPL	4/14/89	2:20				2	VOA/AE-BN-CLP

Relinquished by: (Signature) S. Kozma	Received by: (Signature)	Date/Time 4/14 2:35
--	--------------------------	------------------------

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
------------------------------	--------------------------	-----------

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
------------------------------	--------------------------	-----------

Relinquished by: (Signature)	Received by Mobile Laboratory for field analysis: (Signature)	Date/Time
------------------------------	---	-----------

Discharged by: (Signature)	Date/Time	Received for Laboratory by: (Signature) Thompson (Handwritten)	Date/Time 4/14/89 15:30
----------------------------	-----------	---	----------------------------

Method of Shipment:

CASE FILE

Survey: Chipp Row Date Collected: 4/14/89
Sampler: S. Kaczmar Date Received: 4/1/89

Client Name and Ref. #: Drains and Cell Engineers
Laboratory Number: 3435.001.100

Condition of Shipment: GOOD. Samples were
hand delivered.

Archive? If so how long? NO

Signed: [Signature]
Sample Coordinator

Disposal Procedure: SAMPLES WILL BE RETURNED
TO THE CLIENT

Signed: [Signature]
Date: 5-18-89

* The routine disposal procedure for non-hazardous samples is to dispose of the samples 4 weeks after a typed report is signed and mailed to the client. Water samples are filtered through carbon to the sanitary sewer. Solid samples are sent to a sanitary landfill.

SAMPLE CONTROL RECORD

CLIENT: O'Brien and Gere Engineers DATE REC'D: 4/14/89
 JOB #: 3435.001 100 BIN NUMBER: 34

LABORATORY SAMPLE NUMBER	REMOVED BY	DATE AND TIME REMOVED	REASON	DATE AND TIME RETURNED
I 3589 → 93	M. Flynn	4-17-89 8:30 AM	RNA extraction	4-17-89 9:30 AM
I 3589 → 93	T. Harper	4-17-89 12:45 pm	PCTS	4-17-89 1:10 pm
I 3589 - I 3590	K. Stone	04/18/89 10:48	VOACLP	04/18/89 1355
I 3591 - I 3593 I 3625 - T 3626	K Stone	04/18/89 1355	VOACLP	04/18/89 1500
I 3591	K Stone	04/19/89 1100	VOACLP	04/19/89 1400
I 3592, I 3593	K Stone	04/19/89 1400	VOACLP	04/19/89 1550

SECTION 3

RAW DATA

Volatile Organics

2x dpc Medium Swild

Blank 5.321

16.485g

-tare = 12.4899g

3.9490g = 3.9g

% solids

50.7 I 3591

16.485g

-tare = 12.4762g

4.0198g = 4.0g

I 3591/MS

16.4472g

-tare = 12.4402g

4.0010g = 4.0g

I 3591 MSD

16.4836g

-tare = 12.4265g

4.0440g = 4.0g 4.0171 gram

535 I 3572

16.4681g

-tare = 12.4463g

4.0218g = 4.0g

541 I 3593

16.4186g

-tare = 12.4525g

3.9661g = 4.0g

04/13/89

Suugasa Mixture for Medium Level Soil

Pugasa Suugasa Mix # 4-8876 Lot # LA20846 (2 vials)
250 ^{ug}/me Concentration

- ✓ 8000ul Suugasa Mix 250 ^{ug}/me
 - ✓ + 12000ul MeOH BJT
 - ✓ 8000ul Total
- } x2
- Conc F = 25 ^{ug}/me
(used both vials of Suugasa)

for total of 16000ul = 16me

04/18/89

Blank Medium Level

04/18/89 I 3591

Size + T	16.3613 g	tau =	16.2987
tau =	12.5139 g		12.4667 g
	3.8474 g		3.8320 g
	some odu (tau?)		some odu

% solids
38.6

I 3589

I 3592

tau =	16.4932		16.5830
	12.5218 g		12.5269 g
	3.9714 g		4.0561 g = 4.0g

tau =

I 3593

tau =	16.5447		16.5447
	12.5135 g		12.5135 g
	4.0312 g = 4.0g		

52.1

I 3590

tau =	16.5534		16.5534
	12.5213 g		12.5213 g
	4.0321 g = 4.0g		
	strong odu		strong odu

NEW MEDIUM LEVEL 5-POUR



GC/MS INJECTION LOGBOOK

IS #1	INTERNAL STD AREAS			SUCROGATE AREAS			MATRIX			TAP NO.	RESIDUOT	Reason for SOFT	Suc Lib	
	IS #2	IS #3	SUCR #1	SUCR #2	SUCR #3	Heater Low	Soil Load/med	200	250					300
78637	345519	396201	122220	417195	200455		Med	✓	✓	✓	✓	✓	EDM	
71538	313242	281023	48539	114320	51325		Med	✓	✓	✓	✓	✓	EDM	
70582	345952	308936	255849	265120	430127		Med	✓	✓	✓	✓	✓	EDM	
181913	348871	324881	389854	134476	651858		Med	✓	✓	✓	✓	✓	EDM	
81869	381324	323352	518272	180808	205230		Med	✓	✓	✓	✓	✓	EDM	
81449	373220	323725	124422	435755	242722		Med	✓	✓	✓	✓	✓	EDM	
81332	367310	330964	123931	462473	216839		Med	✓	✓	✓	✓	✓	EDM	
85132	378253	335601	101522	377189	177915		Med	✓	✓	✓	✓	✓	EDM	
82005	389015	326746	102334	381990	91029		Med	✓	✓	✓	✓	✓	EDM	
81322	363267	322219	100880	392586	184425		Med	✓	✓	✓	✓	✓	EDM	
82555	382575	334616					Med	✓	✓	✓	✓	✓	EDM	
81442	381913	324379	120376	421020	201812		Med	✓	✓	✓	✓	✓	EDM	
81799	372222	332144	134276	447792	217516		Med	✓	✓	✓	✓	✓	EDM	
81028	371528	330943	106235	399372	185726		Med	✓	✓	✓	✓	✓	EDM	
78593	363262	321416	98982	346224	173644		Med	✓	✓	✓	✓	✓	EDM	
80327	372883	330224	101089	329225	178477		Med	✓	✓	✓	✓	✓	EDM	
79557	367040	329916	100777	385293	180437		Med	✓	✓	✓	✓	✓	EDM	
81442	380412	33917	102234	377222	210222		Med	✓	✓	✓	✓	✓	EDM	

COMMENTS

Forms II, III, IV, V

2B
SOIL VOLATILE SURROGATE RECOVERY

Lab Name: OBG LABORATORIES INC. Contract: 3435.001.100

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Level: (low/med) MED

	EPA SAMPLE NO.	S1 (TOL) ‡	S2 (BFB) ‡	S3 (DCE) ‡	OTHER	TOT OUT
01	VBLK041801	102	103	100		0
02	I3589	83	83	78		0
03	I3590	85	89	85		0
04	I3591RE	95	91	89		0
(I3625) 05	I3591MS	88	86	85		0
(I3626) 06	I3591MSD	86	85	85		0
07	I3592	91	86	85		0
08	I3593	86	98	87		0
09	VBLK041901	104	104	103		0
10						
11						
12						
13						
14						
15						
16						
17						
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22						
23						
24						
25						
26						
27						
28						
29						
30						

QC LIMITS

S1 (TOL) = Toluene-d8 (81-117)
 S2 (BFB) = Bromofluorobenzene (74-121)
 S3 (DCE) = 1,2-Dichloroethane-d4 (70-121)

‡ Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

3B
SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: OBG LABORATORIES, INC. Contract: 3435.001.100
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____
 Matrix Spike - EPA Sample No.: I3591 Level: (low/med) MED

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	6250	0	5860	94	59-172
Trichloroethene		0	5920	95	62-137
Benzene		0	6390	102	66-142
Toluene		130	6120	96	59-139
Chlorobenzene	↓	0	5750	92	60-133

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	REC.
1,1-Dichloroethene	6250	5820	93	1	22	59-172
Trichloroethene		5930	95	0	24	62-137
Benzene		6340	101	1	21	66-142
Toluene		6120	96	0	21	59-139
Chlorobenzene	↓	5860	94	-2	21	60-133

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits
 Spike Recovery: 0 out of 10 outside limits

COMMENTS: Wet weight basis for concentration
Three significant figures used

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: OBG LABORATORIES, INC. Contract: 3435.001.100
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____
 Lab File ID: >V2321 Lab Sample ID: VBLK041801
 Date Analyzed: 04/18/89 Time Analyzed: 1040
 Matrix: (soil/water) SOIL Level: (low/med) MED
 Instrument ID: HP5987A

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01		I3589	>V2322	1152
02		I3590	>V2323	1322
03				
04				
05				
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26				
27				
28				
29				
30				

COMMENTS: _____

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: OBG LABORATORIES, INC. Contract: 3435.001.100

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Lab File ID: >V2329 Lab Sample ID: VBLK041901

Date Analyzed: 04/19/89 Time Analyzed: 1029

Matrix: (soil/water) SOIL Level: (low/med) MED

Instrument ID: HP5987A

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01		I3591RE	>V2330	1144
02		I3591MS (I3625)	>V2331	1300
03		I3591MSD (I3626)	>V2332	1356
04		I3592	>V2333	1450
05		I3593	>V2334	1545
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
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30				

COMMENTS: _____

5A
VOLATILE ORGANIC GC/MS TUNING AND MASS
CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: OBG Laboratories Inc. Contract: 3435.001/100

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Lab File ID: > V2313 BFB Injection Date: 04/17/89

Instrument ID: HP5987A BFB Injection Time: 1054

Matrix: (solid/liquid) SOL Level: (low/med) MED Column: (pack/cap) PAK

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.3
75	30.0 - 60.0% of mass 95	50.3
95	Base peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7.1
173	Less than 2.0% of mass 174	68.4
174	Greater than 50.0% of mass 95	4.7 (6.1) 1
175	5.0 - 9.0% of mass 174	65.2 (55.4) 1
176	Greater than 95.0%, but less than 101.0% of mass 174	3.7 (2.5) 2
177	5.0 - 9.0% of mass 176	

1-Value is % mass 174 2-Value is % mass 176

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, BS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	>V2314	04/17/89	114.2
02	VSTD030	>V2315		125.3
03	VSTD100	>V2316		130.0
04	VSTD150	>V2317		128.1
05	VSTD200	>V2318		128.1
06				
07				
08				
09				
10				
11				
12				
13				
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15				
16				
17				
18				
19				
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22				

5A

VOLATILE ORGANIC GC/MS TUNING AND MASS
CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: OBG Laboratories Inc. Contract: 3435.001.100
 Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____
 Lab File ID: > V2319 BFB Injection Date: 04/18/89
 Instrument ID: HP5987A BFB Injection Time: 0836
 Matrix: (soil/water) SOIL Level: (low/med) MED Column: (pack/cap) PACK

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.3
75	30.0 - 60.0% of mass 95	47.0
95	Base peak, 100% relative abundance	100.
96	5.0 - 9.0% of mass 95	6.2
173	Less than 2.0% of mass 174	0 (C) 11
174	Greater than 50.0% of mass 95	68.0
175	5.0 - 9.0% of mass 174	3.8 (5.6) 11
176	Greater than 95.0%, but less than 101.0% of mass 174	65.7 (77.0) 11
177	5.0 - 9.0% of mass 176	3.9 (5.7) 12

1-Value is % mass 174

2-Value is % mass 176

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	> V2320	04/18/89	0719
02	VBLK041801	> V2321		1040
03	I3589	> V2322		1152
04	I3590	> V2323	✓	1322
05				
06				
07				
08				
09				
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12				
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19				
20				
21				
22				

5A
VOLATILE ORGANIC GC/MS TUNING AND MASS
CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: OBG Laboratories Inc. Contact: 3435.001.100

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Lab File ID: >V2327 BFB Injection Date: 04/9/87

Instrument ID: HPS987A BFB Injection Time: 0845

Matrix: (soil/water) SOIL Level: (low/med) MED Column: (pack/cap) PACK

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.8
75	10.0 - 60.0% of mass 95	45.1
95	Base peak, 100% relative abundance	100.
96	5.0 - 9.0% of mass 95	7.8
173	Less than 2.0% of mass 174	0 (0) 1
174	Greater than 50.0% of mass 95	67.5
175	5.0 - 9.0% of mass 174	4.6 (6.5) 1
176	Greater than 95.0%, but less than 101.0% of mass 174	65.4 (96.8) 1
177	5.0 - 9.0% of mass 176	3.8 (5.7) 2

1-Value is mass 174 2-Value is mass 176

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, BS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	>V2328	04/9/88	0923
02	VBK041901	>V2329		1029
03	T3591RE	>V2330		1122
04	T3591MS (T3625)	>V2331		1300
05	T3591MSD/T3626	>V2332		1356
06	T3592	>V2333		1450
07	T3593	>V2334		1545
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

Sample Data

QUANT REPORT

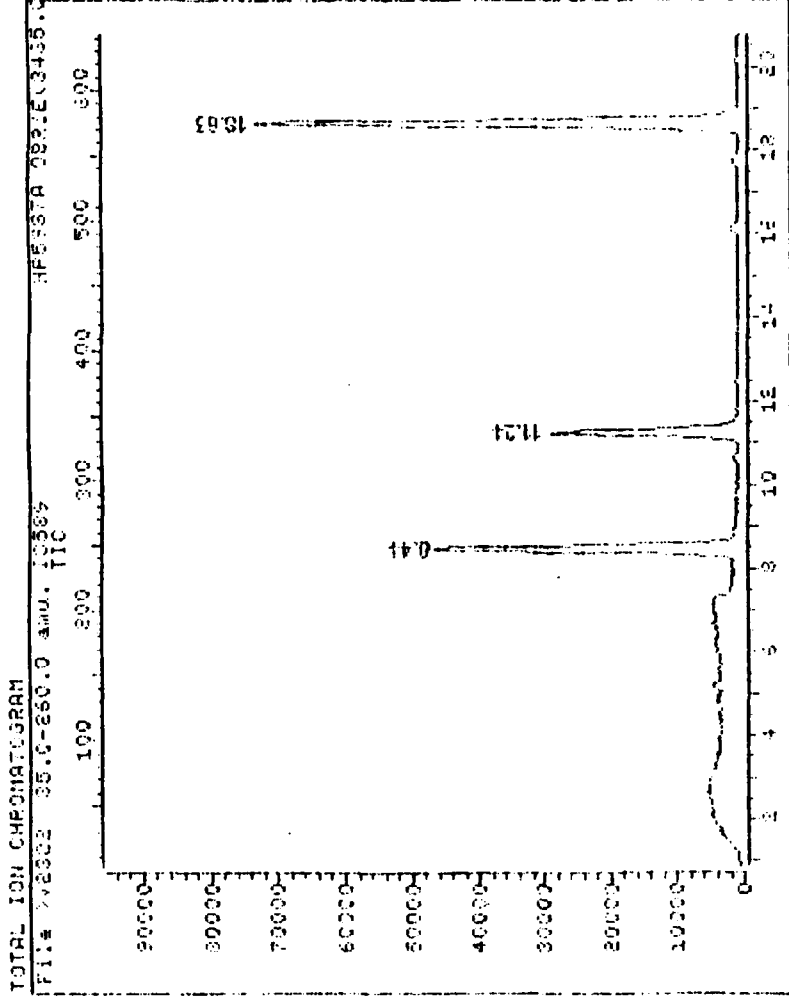
Operator ID: KAREN Quant Rev: 6 Quant Time: 890418 11:29
 Output File: 002322:01 Injected at: 890418 11:52
 Data File: 002322:02 Dilution Factor: 1.00000
 Name: 15539
 Misc: HP5987A DBRIE(3435.001.100)P1

ID File: IDUML:EX
 Title: CLP VOA ID FILE (PACKED COLUMN)
 Last Calibration: 890418 11:29

	Compound	R.T.	Q ion	Area	Conc	Units	g
1)	*Bromochloromethane	8.44	128.0	85137	250.00	NG	98
6)	Methylene Chloride	5.18	84.0	2535	4.45	NG	97
7)	Acetone	6.14	43.0	4742	26.41	NG	75
✓13)	Chloroform	10.61	63.0	2786	2.97	NG	99
15)	1,2-Dichloroethane-d4	11.24	65.0	101500	195.14	NG	94
18)	*1,4-Difluorobenzene	18.63	114.0	379385M	250.00	NG	100
✓19)	2-Butanone	11.36	72.0	1939	28.98	NG	99
✓27)	Benzene	16.11	78.0	3028	3.85	NG	100
✓32)	*Chlorobenzene-d5	23.45	117.0	335601M	250.00	NG	97
37)	Toluene-d8	22.25	98.0	377159	208.74	NG	100
✓38)	Toluene	22.42	92.0	4562	4.00	NG	98
41)	Bromofluorobenzene	27.35	95.0	177915	207.60	NG	84
43)	m-Xylene	28.50	103.0	4362	4.45	NG	98
✓44)	Xylene (total)	29.29	103.0	4362	5.73	NG	99

* Compound is ISTD

$$\text{Xylene} = \frac{4362}{335601} \times \frac{250}{0.70428} = 4.61 \text{ NG}$$



Data File: >01312:02 . Quant Output File: 027201:01

Name: 23509

File: HP5937A 0921E(3435.001.100)F1

ID File: 00PL31E1

Title: CLR VCR IO FILE (PACKED COLUMN)

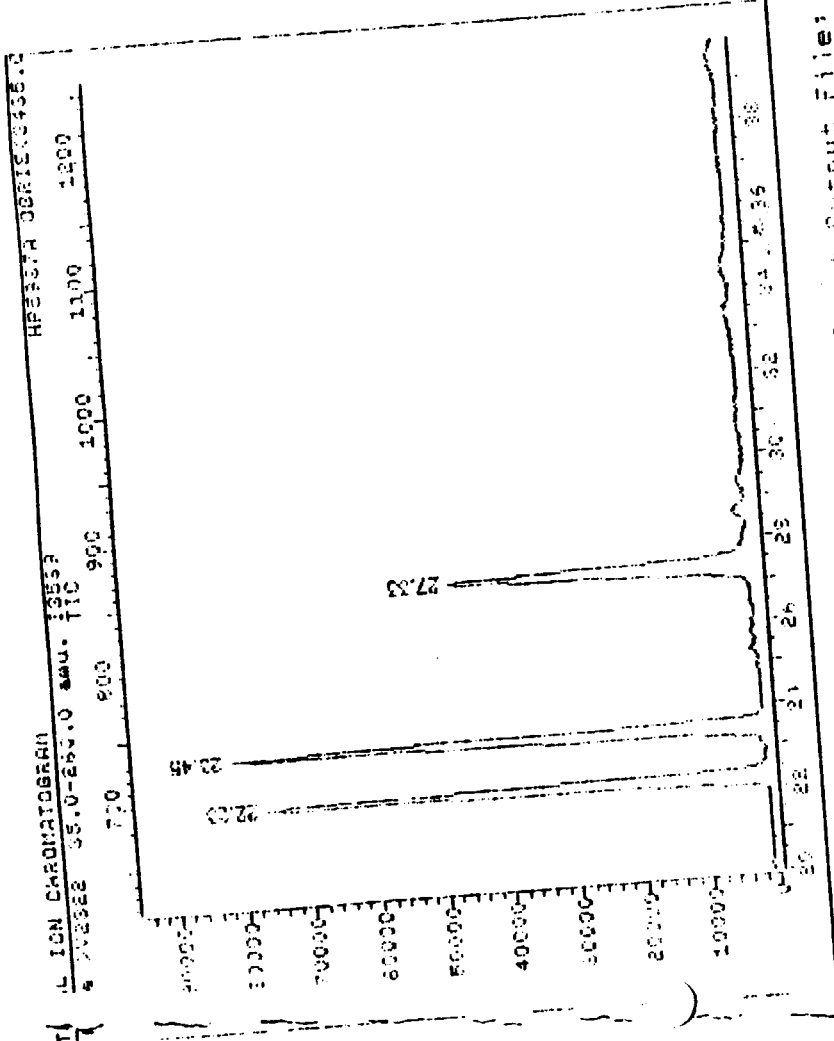
Last Calibration: 290418 11:29

Operator ID: KAREN

Quant Time: 990418 12:44

Injected at: 870418 11:52

TIC page 1 of 2



Quant Output File: \V2322:1D1

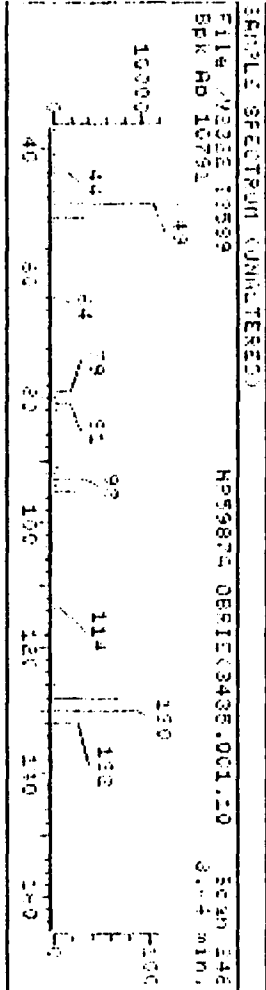
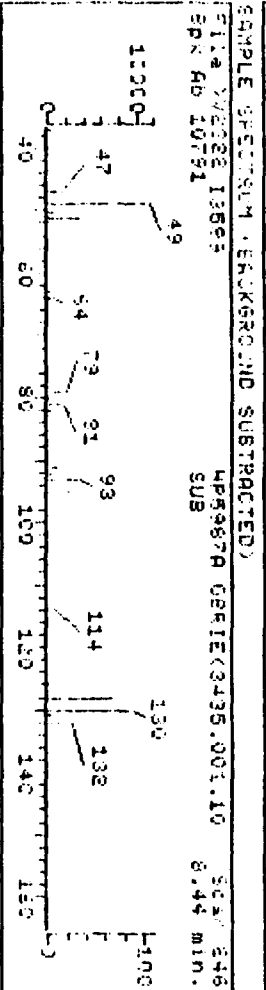
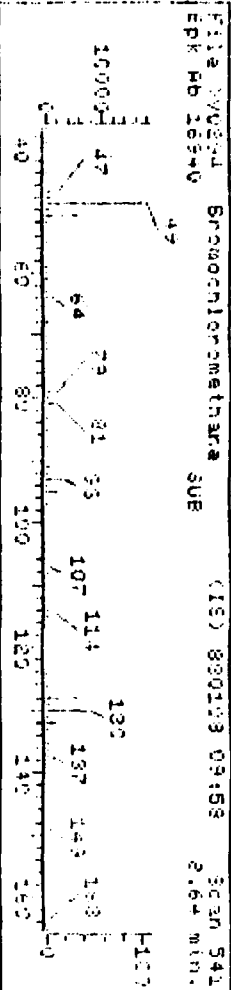
Data File: >V2322:1D2
 Name: 131597
 Desc: HP5987A 08150435.001.1001P1

Id File: IDUMLE:EN
 Title: CLP DOA ID FILE (PACKED COLUMN)
 Last Calibration: 890418 11:29

Operator ID: KAREN
 Quant Time: 890418 12:44
 Injected at: 890418 11:52

TIC page 2 of 2

REFERENCE STANDARD SPECTRUM



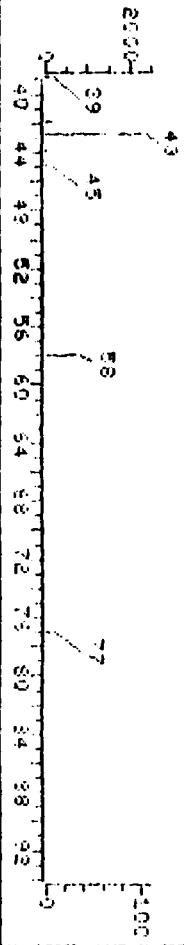
Data File: 002322:02 Quant Output File: 002322:01

Name: 18888
 Misc: HPS987A 08RIE(3435.001.100)P1 Quant IO File: 10000:4E
 Quant Time: 890418 12:44 Last Calibration: 890418 11:52
 Injected at: 890418 11:52

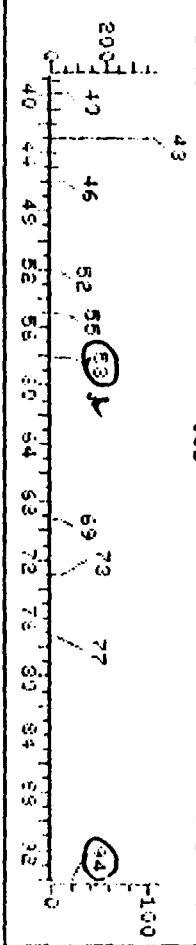
Compound No: 1 (ISTD)
 Compound Name: Bromochloromethane
 Scan Number: 546
 Retention Time: 8.44 min.
 Quant Ion: 130
 Area: 85157
 Concentration: 250.00 NG
 s-value: 72

REFERENCE STANDARD SPECTRUM

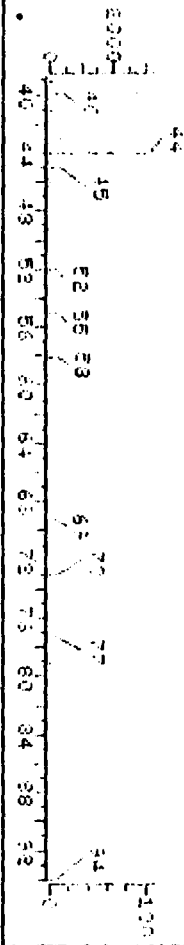
File: V02582 Acetone SUB 820307 13:14 Scan 161
PK NO 2582 5.25 min.



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)
File: V02582 I3589 H05987A ORIE(3435.001.10) Scan 172
PK NO 354 SUB 6.14 min.



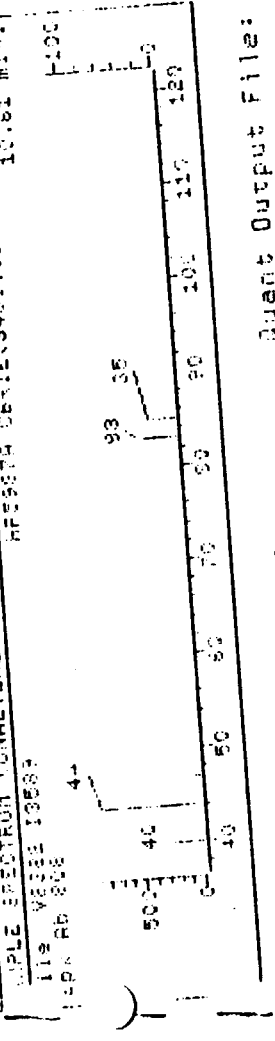
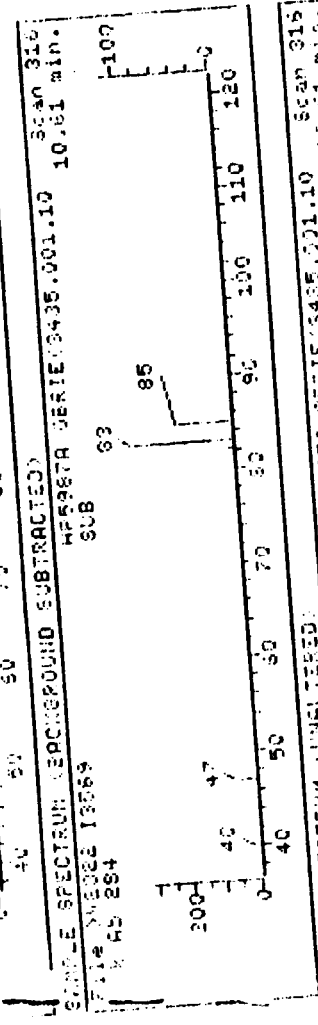
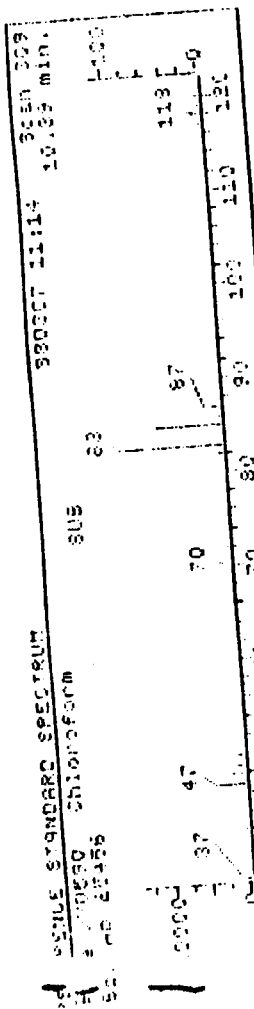
SAMPLE SPECTRUM (UNFILTERED)
File: V02582 I3589 H05987A ORIE(3435.001.10) Scan 172
PK NO 3589 SUB 6.14 min.



Data File: V02572::02 Quant Output File: V02572::01

Name: I3589
Alias: H05987A ORIE(3435.001.100)P1
Quant Time: 890418 12:44
Injected at: 890418 11:52
Quant ID File: I300001164
Last Calibration: 890416 11:29

Compound No: 7
Compound Name: Acetone
Scan Number: 172
Retention Time: 6.14 min.
Quant Ion: 43
Area: 4742
Concentration: 26.41 mg
Q-Value: 75



Quant Output File: \V2322\01

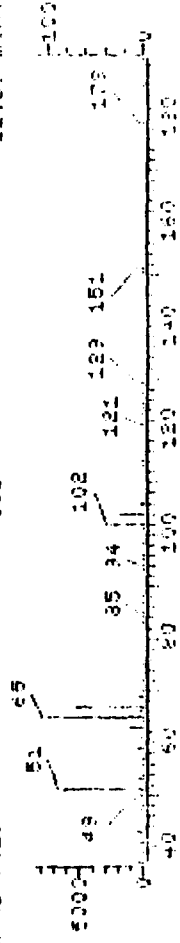
Date File: \V2322\02

Name: I3109
 Miss: HF5957A DSXIE(3435.001.100)PI Quant ID File: IDVML:EF
 890418 12:44 List Calibration: 890418 11:20
 Injected at: 890418 11:52

Compound No: 12
 Compound Name: Chloroform
 Scan Number: 315
 Retention Time: 10.61 min.
 Quant Ion: 87.0
 Area: 2756
 Concentration: 2.97 ng
 Units: pg

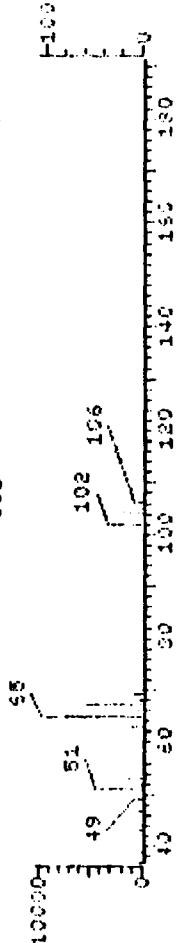
REFERENCE STANDARD SPECTRUM

File: 025224 1,2-Dichloroethane d-4 (SURR) SEC100 C91P3 Scan 719
 Exp: 05 7529 SUB 11.24 min.



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File: 025222 13589 HPS937A 06R1E(3+35.001.10 Scan 236
 Exp: 05 9162 SUB 11.24 min.



SAMPLE SPECTRUM (UNALYSED)

File: 025222 13589 HPS937A 06R1E(3+35.001.10 Scan 236
 Exp: 05 9162 SUB 11.24 min.



Date File: 025222:02

Quant Output File: 025222:02

Name: 13589

File: HPS937A 06R1E(3+35.001.100/P1

Quant Time: 370418 12:44

Quant ID File: 109701:02

Injected at: 370418 11:52

Last Calibration: 370418 11:27

Compound No: 15

Compound Name: 1,2-Dichloroethane-d4

Scan Number: 370

Retention Time: 11.24 min.

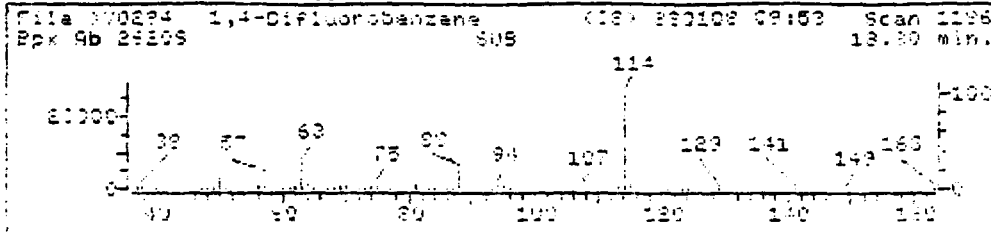
Quant Ion: 53.0

Area: 101500

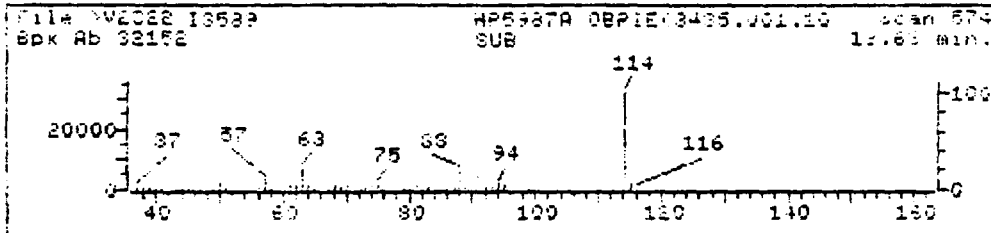
Concentration: 195.14 ug

Quality: 84

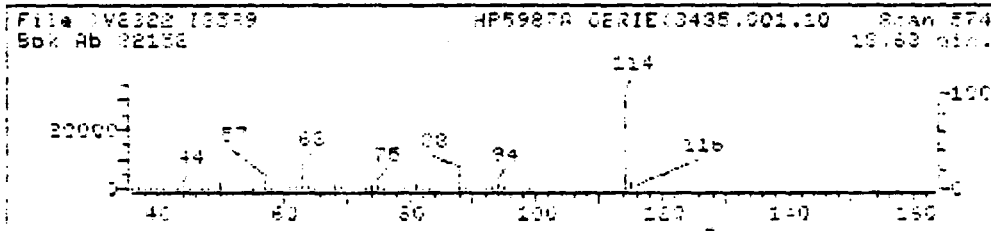
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

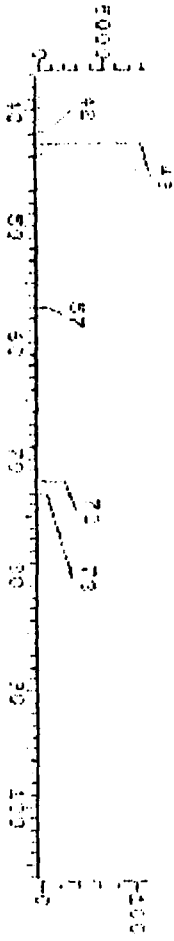


Data File: >V02322::02 Quant Output File: >V02322::01
 Name: 13589
 Misc: HP5987A DBP1E(3435.001.10)P1
 Quant Time: 890418 12:42 Quant ID File: IDVNL:EX
 Injected at: 890418 11:52 Last Calibration: 890418 11:29

Compound No: 18 (ISTD)
 Compound Name: 1,4-Difluorobenzene
 Scan Number: 574
 Retention Time: 18.63 min.
 Quant Ion: 114.0
 Grade: 37065M
 Concentration: 250.00 NG
 Multiplier: 100

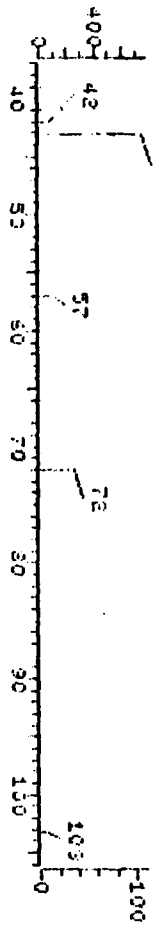
REFERENCE STANDARD SPECTRUM

FILE: 135888 2-BUTANONE (REF) SUB 110507 2114 28.98 MIN.



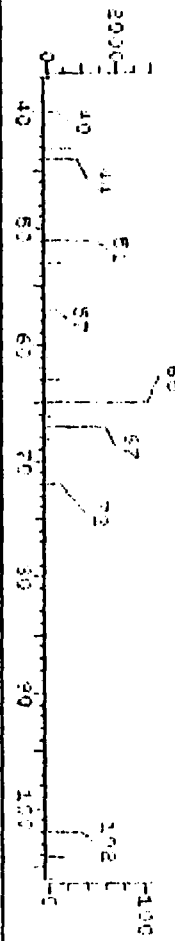
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

FILE: 135889 HPE9379 DB1E03435.001.D SUB 11.56 MIN.



SAMPLE SPECTRUM (UNFILTERED)

FILE: 135892 10589 HPE9379 DB1E03435.001.D SUB 11.56 MIN.



Data File: 1027522:102

Quant Output File: 1027522:101

Name: 13589

Misc: HPE9379 DB1E(3435.001.100)P1

Quant Time: 890418 12:44

Quant IC File: 100ML:EX

Injected at: 890418 11:52

Last Calibration: 890418 11:29

Compound No: 19

Compound Name: 2-Butanone

Scan Number: 344

Retention Time: 11.56 min.

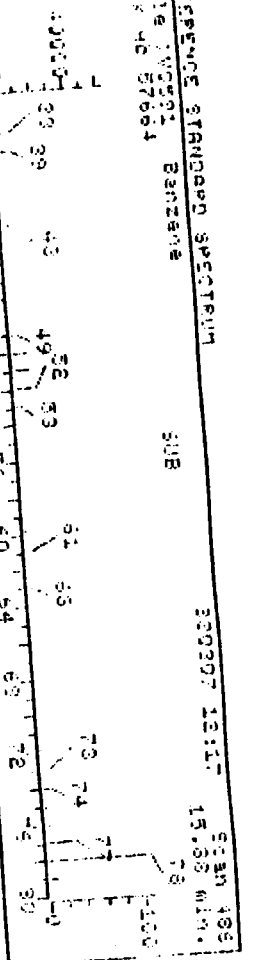
Quant Area: 28.0

Area: 1539

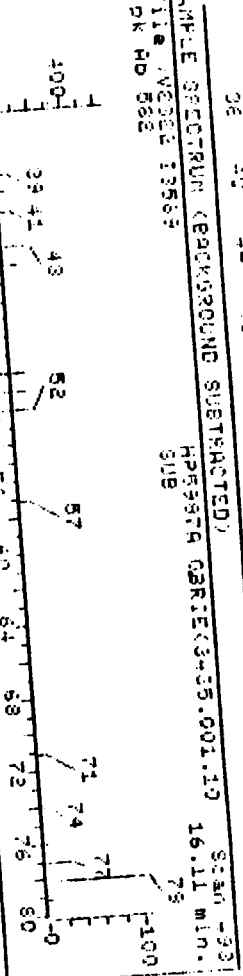
Concentration: 28.98 NG

q-values: 99

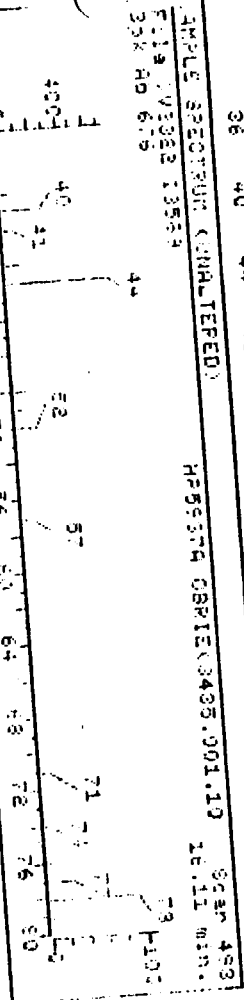
REFERENCE STANDARD SPECTRUM
 1a 100001 Benzene SUB
 PK NO 87864



SMPL SPECTRUM (BACKGROUND SUBTRACTED)
 FILE: V6382 13567 H#59379 G#RIE(3435.001.10) Scan 488
 PK NO 882 SUB 16.11 min.



SMPL SPECTRUM (UNLIFIED)
 FILE: V6382 13567 H#59379 G#RIE(3435.001.10) Scan 488
 PK NO 878



Data File: >02522::02

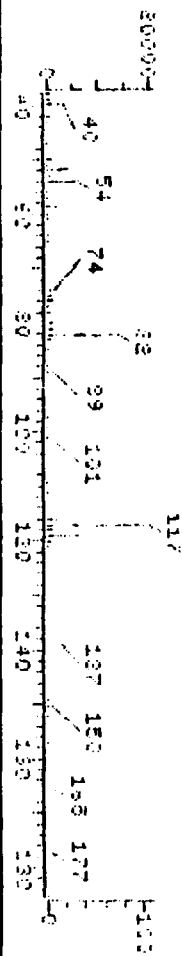
Quant Output File: >02522::01

Name: ID109 Quant ID File: ID0ML:488
 Misc: H#59379 G#RIE(3435.001.100)P1
 Quant Time: 890418 12:44 Last Calibration: 890418 11:29
 Injected at: 890418 11:52

Compound No: 27
 Compound Name: Benzene
 Scan Number: 488
 Retention Time: 16.11 min.
 Quant Ion: 78.0
 Area: 5033
 Concentration: 3.85 NG
 Abundance: 100

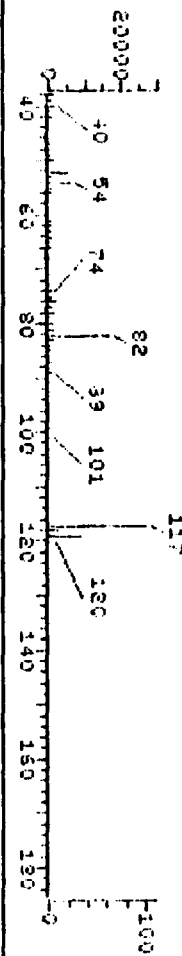
REFERENCE STANDARD SPECTRUM

File: 100294 Chlorobenzene d-2 909 419.080108 09:159 8630 1432
SOL: RB 19024



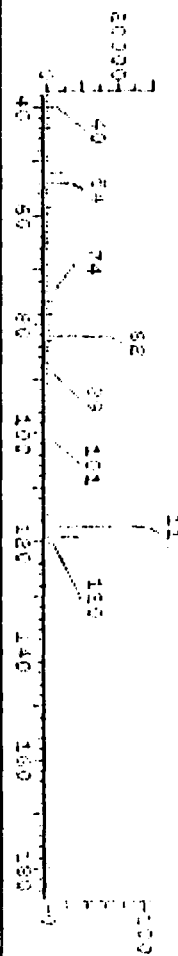
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File: 20222213009 RFS987A DBRIE(0435.001.10 8630 789
EXP: RB 26848 302 21.45 min.



SAMPLE SPECTRUM (UNBLEEDED)

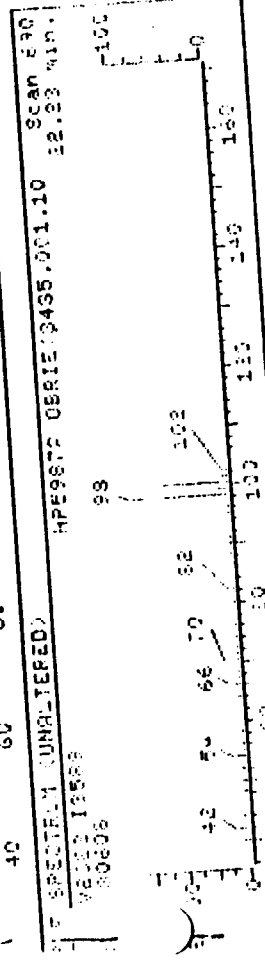
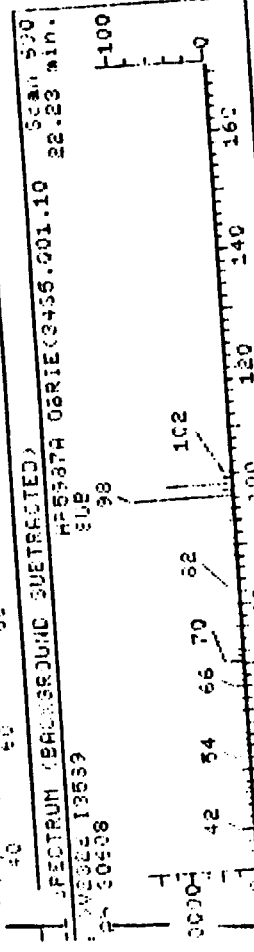
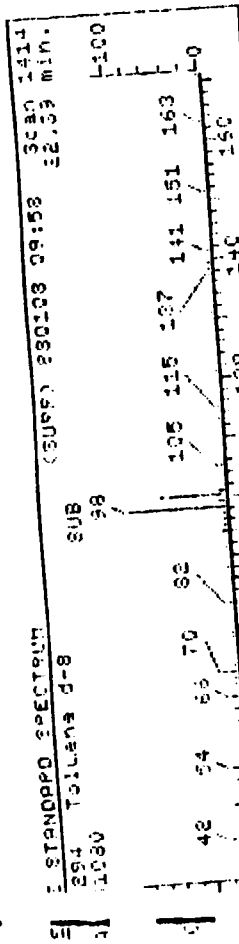
File: 20222213009 RFS987A DBRIE(0435.001.10 8630 789
EXP: RB 26848



Data File: 2022221:02 Quant Output File: 0222221:01

Name: RFS987A
Mass: RFS987A DBRIE(0435.001.10)F1 Quant ID File: 100294
Quant Time: 890418 12:44 Last Calibration: 200418 11:21
Injected at: 890418 11:52

Compound No: 32 (1375)
Compound Name: Chlorobenzene-d5
Scan Number: 729
Retention Time: 23.45 min.
Quant Ion: 117.0
Area: 155601M
Concentration: 250.00 NG
g-value: 97



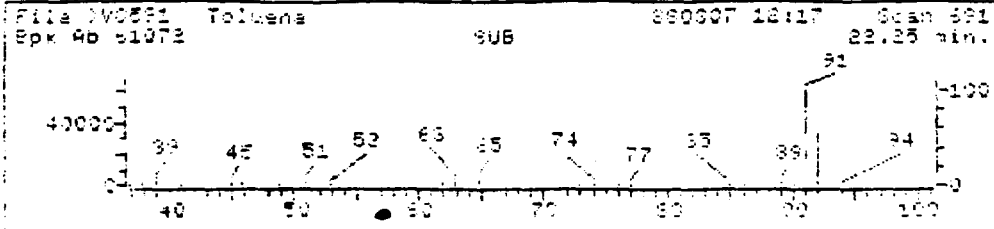
Quant Output File: \V2322::D1

Data File: \V2322::D2

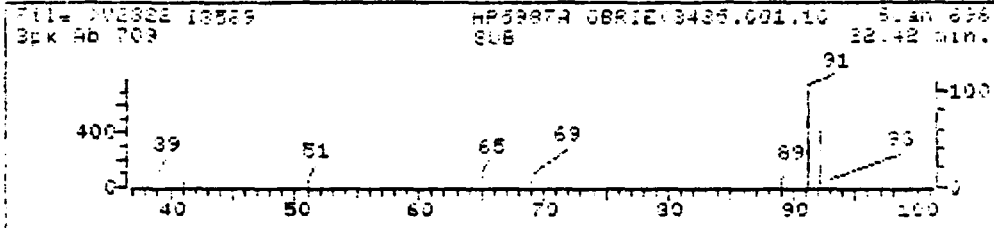
Scan: 13529
 Exp: HP5987A Q8RIE(3435.001.100)P1 Quant ID File: I0041:EX
 Quant Time: 890418 12:44 Last Calibration: 890418 11:29
 Injected at: 890418 11:52

Compound No.: 57
 Compound Name: Toluene-d8
 Scan Number: 690
 Retention Time: 22.23 min.
 Quant Ion: 98.0
 Area: 377189
 Concentration: 208.74 NG
 q-value: 110

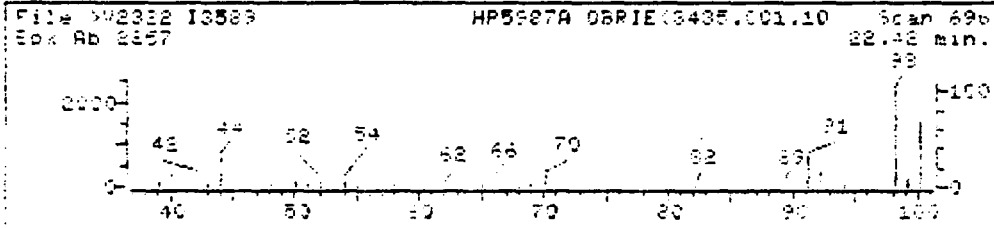
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >V02322::02

Quant Output File: >V02322::01

Name: 13589

Misc: HP5987A DBRIE(3435.001.10)P1

Quant Time: 890418 12:44

Quant ID File: IDVNL:43

Injected at: 890418 11:52

Last Calibration: 890418 11:29

Compound No: 30

Compound Name: Toluene

Scan Number: 696

Retention Time: 22.42 min.

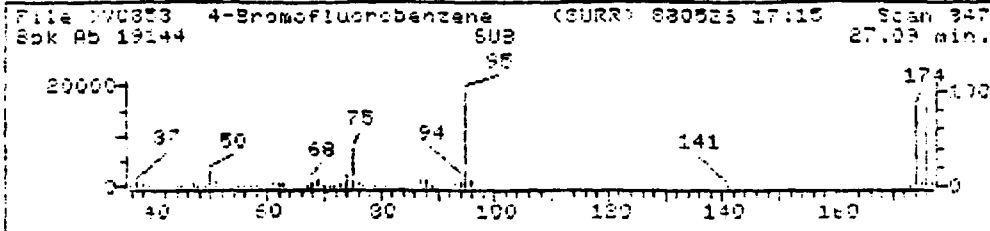
Quant Ion: 92.0

Area: .4562

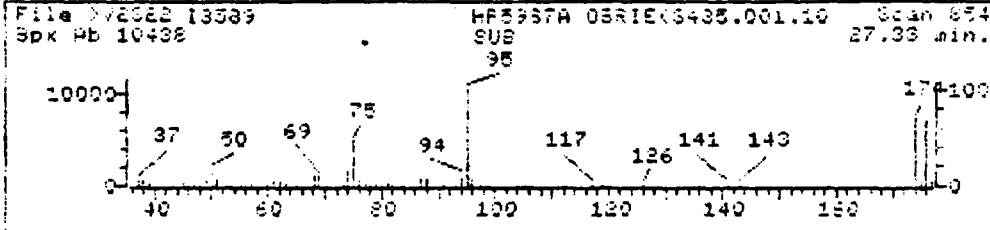
Concentration: 4.00 NG

q-value: 98

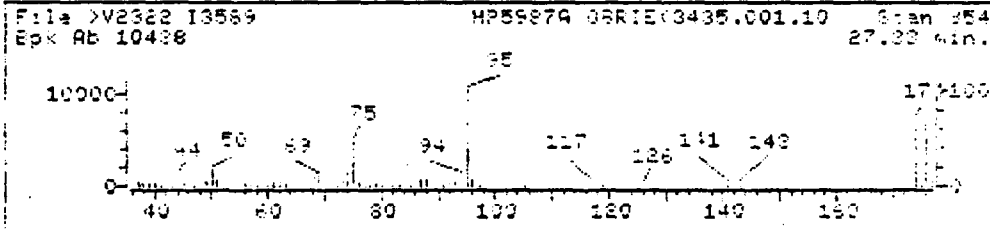
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >V2322::D2

Quant Output File: >V2322::D1

Name: 13589

Misc: HP5987A 08RIE(3435.001.100)P1

Quant Time: 890418 12:44

Quant ID File: ID0ML::EX

Injected at: 890418 11:52

Last Calibration: 890418 11:29

Compound No: 41

Compound Name: Bromofluorobenzene

Scan Number: 854

Retention Time: 27.33 min.

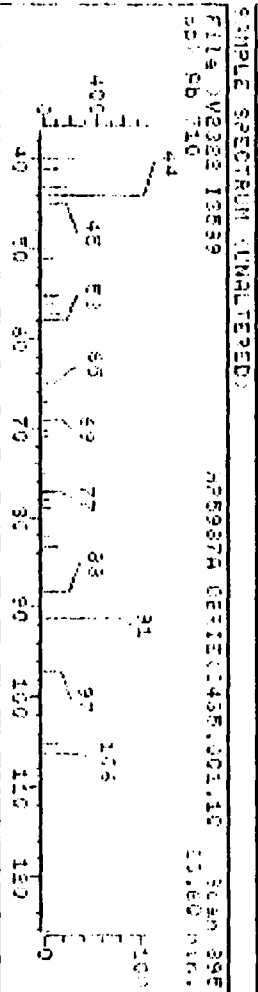
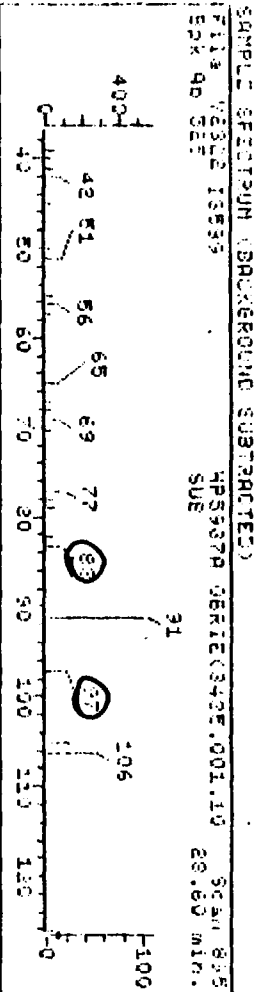
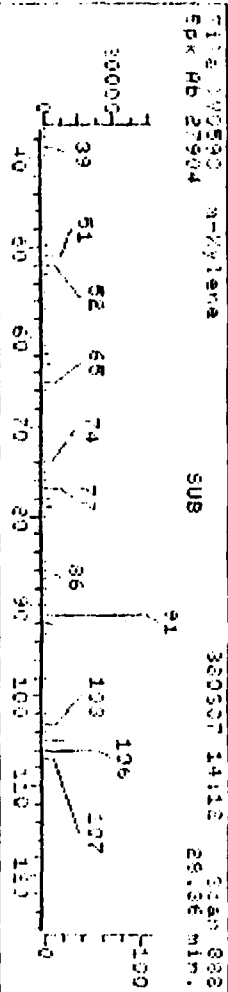
Quant Ion: 95.0

Area: 177915

Concentration: 207.90 NG

q-value: 94

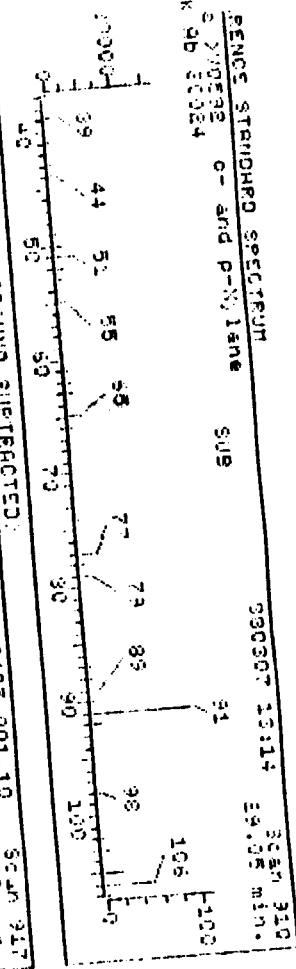
REFERENCE STANDARD SPECTRUM



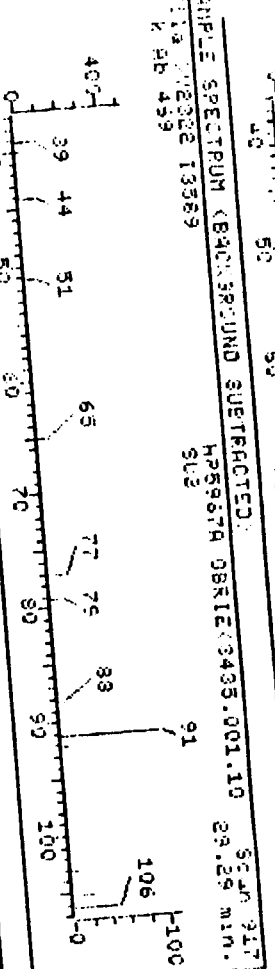
Data File: V02322::02 Quant Output File: V02322::01
 Name: 12590
 Hisc: HP5937A DEBIE(3435.001.100)P1 Quant ID File: 104PL:12
 Quant Time: 890418 12:44 Last Calibration: 890418 11:29
 Injected at: 890418 11:52

Compound No: 45
 Compound Name: m-Xylene
 Scan Number: 835
 Retention Time: 28.60 min
 Quant Ion: 106.0
 Area: 4235
 Concentration: 4.46 ug
 g-values: 99

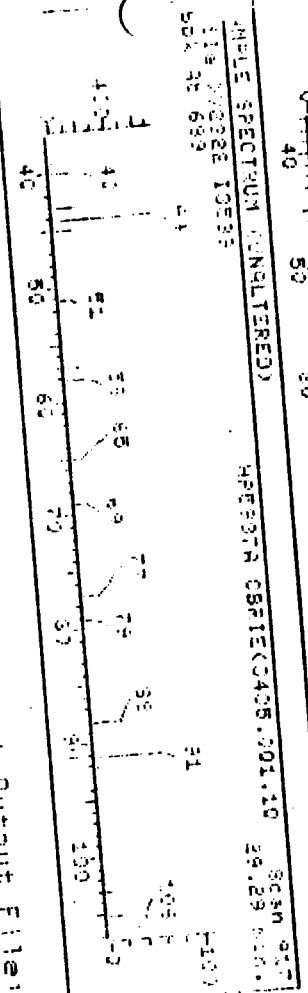
PENCE STANDARD SPECTRUM
 C- and p-Xylene
 SUE
 090307 13:14 Scan 210
 29.05 min.
 OK 98 8024



FILE 002322 13569 H25987A DBRIE(3435.001.10) Scan 217
 29.29 min.
 K Ab 459



FILE 002322 10595 H25987A DBRIE(3405.001.10) Scan 217
 29.29 min.
 SUX 25 699



Quant Output File: 002322:01

Data File: 002322:02
 Name: 25520
 Miss: H25987A DBRIE(3435.001.100)P1 Quant ID File: 200ML:EX
 11:41
 Quest Time: 370413 11:41 User Calibration: 890219 11:19
 Injected at: 890413 11:52

Compound Net: 66
 Compound Name: Xylene (total)
 Scan Number: 217
 Retention Time: 29.29 min.
 Quant Ion: 106.0
 Area: 4532
 Concentration: 5.72 NG
 d-value: 99

QUANT REPORT

Operator ID: KAREN
 Output File: \V2323::01
 Data File: \V2323::02
 Name: I3390
 Misc: HF3967A QBRIE(3435.001.100)P1

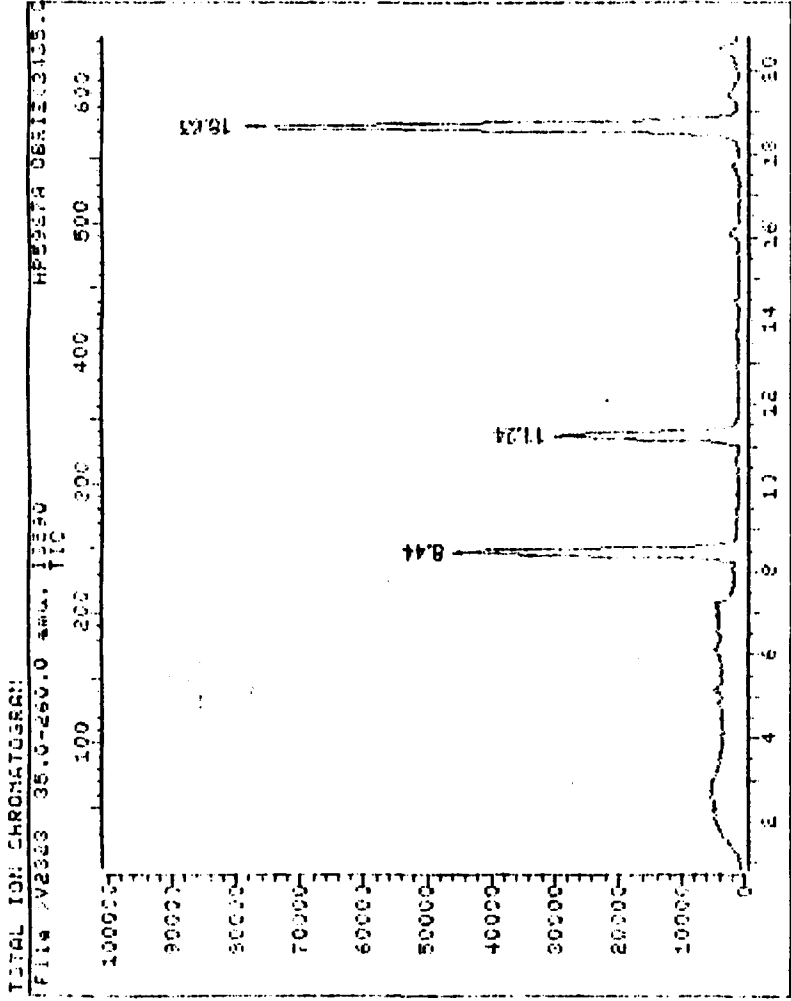
Quant Rev: 6
 Quant Time: 890418 14:12
 Injected at: 890418 15:22
 Dilution Factor: 1.00000

ID File: IDUHL:EX
 Title: CLP VCA ID FILE (PACKED COLUMN)
 Last Calibration: 890418 11:29

Compound	R.T.	Q ion	Area	Conc	Units	g
1) *Bromochloromethane	8.44	128.0	82495	250.00	MG	93
✓ 1) Methylene Chloride	5.15	84.0	2591	4.67	MG	90
✓ 1) Acetone	6.11	43.0	6042	34.72	MG	93
✓ 1) Chloroform	10.65	83.0	2728	5.00	MG	92
12) 1,2-Dichloroethane-d4	11.24	65.0	106824	211.95	MG	87
13) *1,4-Difluorobenzene	18.63	114.0	589015	250.00	MG	100
✓ 12) 2-Butanone	11.33	72.0	1922	27.96	MG	94
13) *Chlorobenzene-d5	13.43	117.0	536240	250.00	MG	96
14) *Toluene-d8	10.71	91.0	2211	1.12	MG	92
✓ 13) Toluene-d8	22.24	98.0	384990M	211.53	MG	100
✓ 13) Toluene	22.42	92.0	54037	47.50	MG	98
14) Ethylbenzene	26.31	106.0	59125	23.05	MG	94
✓ 14) Bromofluorobenzene	27.34	95.0	191009M	222.57	MG	96
15) m-Xylene	28.61	106.0	153650M	173.03	MG	93
✓ 14) m-Xylene (total)	27.53	106.0	199751M	249.73	MG	93

* Compound is ISTD

$$\text{Total Xylene} = \frac{(163836 + 189951)}{336240} \times \frac{250}{0.70428} = 373.50 \text{ NG}$$



Date File: V2323::02 Quant Output File: V2323::01

Name: 12520

File: HP5987A DBRIE(3453.001.100)P1

ID File: IDVPL41EX

Title: CLP_VQA ID FILE (PACKED COLUMN)

Last Calibration: 890418 11:29

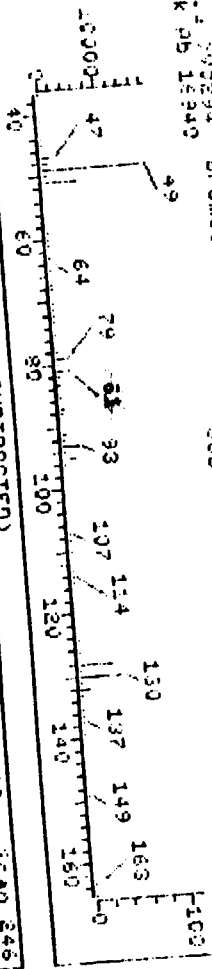
Operator ID: K43EN

Quant Time: 890418 14:12

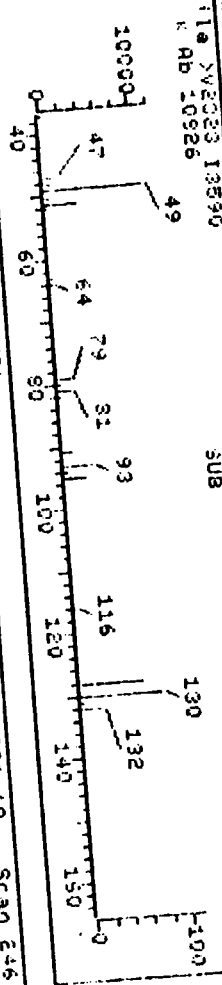
Injected at: 890418 13:22

TIC page 1 of 2

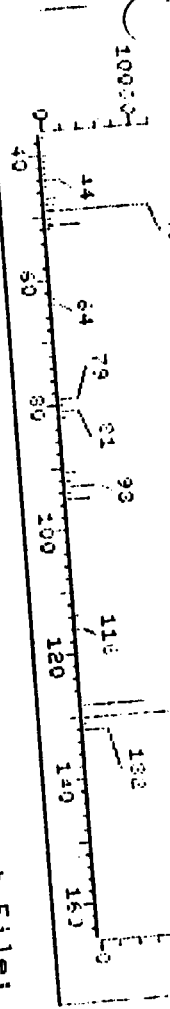
REFERENCE STANDARD SPECTRUM
 FILE #V23231 Bromochloromethane SUB (13) 853108 09:52 Scan 246
 PK #05 15390 8:54 min.



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)
 FILE #V23233 13590 HPS987A OBRIE(3435.001.10) Scan 246
 PK #05 10926 SUB 8:44 min.



SAMPLE SPECTRUM (UNALTERED)
 FILE #V23233 13590 HPS987A OBRIE(3435.001.10) Scan 246
 PK #05 10926 SUB 8:44 min.



Data File: V23233:102 Quant Output File: V23233:01

Name: 13590 Quant ID File: 10UM1:EX
 Misc: HPS987A OBRIE(3435.001.100)P1
 Quant Time: 890418 14:12 Last Calibration: 890418 11:29
 Injected at: 890418 13:22

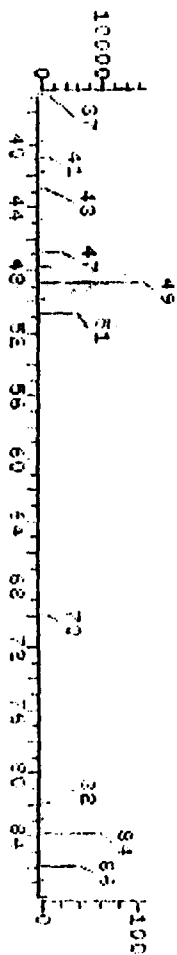
Compound No: 1 (ISTD)
 Compound Name: Bromochloromethane
 Scan Number: 246
 Retention Time: 8.44 min.
 Quant Ion: 125.0
 Area: 82495
 Concentration: 250.00 MS
 q-value: 98

REFERENCE STANDARD SPECTRUM

File: V06930 Methylene Chloride SUB

890907 11:14

Scan 137
5.05 min.

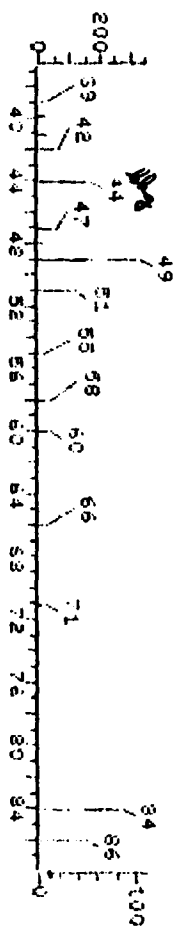


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File: V06930 18590

MS9679 DBRIE(3435.001.10 SUB

Scan 143
5.15 min.

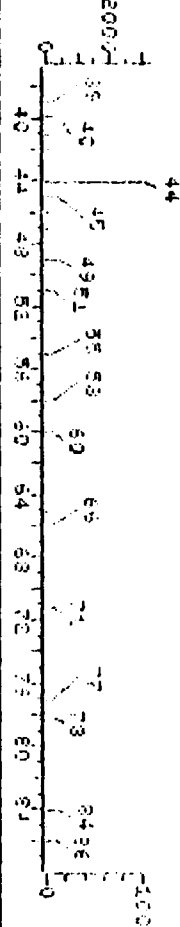


SAMPLE SPECTRUM (UNFILTERED)

File: V06930 18590

MS9679 DBRIE(3435.001.10

Scan 140
5.15 min.



Date: File: V02327::02

Quant Output File: V02327::01

Name: 1859

File: MS9679 DBRIE(3435.001.100)P1

Quant Time: 890412 14:12

Quant ID File: 180ML:180

Injected at: 890412 15:22

Last Calibration: 890412 11:29

Compound No: 0

Compound Name: Methylene Chloride

Scan Number: 140

Retention Time: 5.15 min.

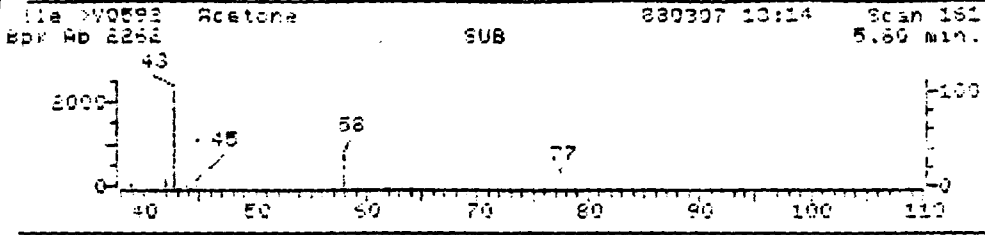
Quant Ion: 84.0

Area: 2591

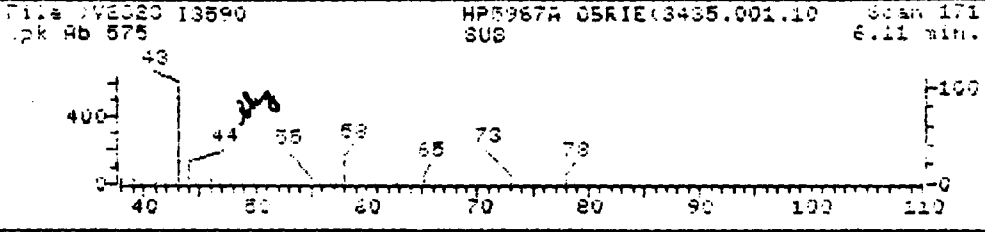
Concentration: 4.67 ug

q-value: 88

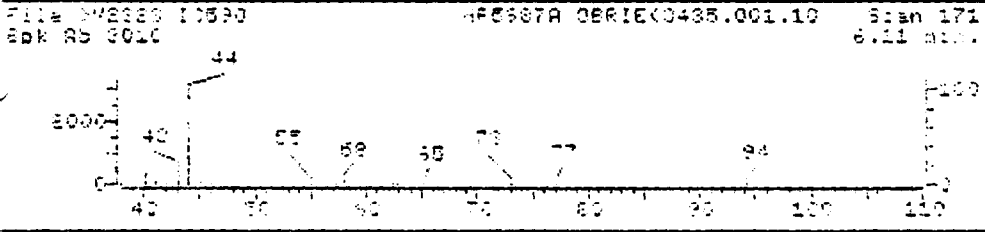
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

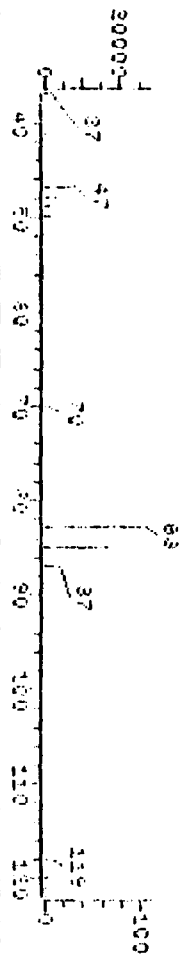


Data File: >02323:02 Quant Output File: >02323:01
 Name: I3590
 Misc: HP5987A DBFIE(3435.001.100)P1
 Quant Time: 890418 14:12 Quant IO Files: SUM1:EX
 Injected at: 890418 13:22 Last Calibration: 890418 11:27

Compound No: 7
 Compound Name: Acetone
 Scan Number: 171
 Retention Time: 6.11 min.
 Quant Ion: 43 C
 Area: 6042
 Concentration: 34.72 NG
 q-value: 83

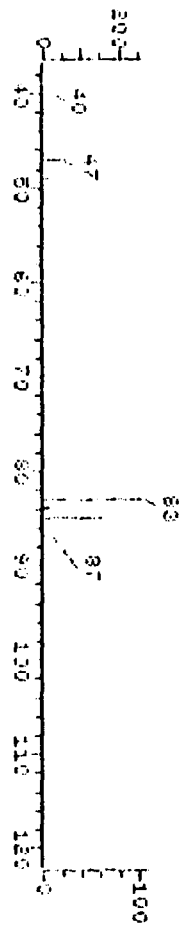
REFERENCE STANDARD SPECTRUM

File X06390 Chloroform SUB 320307 11:14 32AM 0051
Exp No 25456 10.35 min.



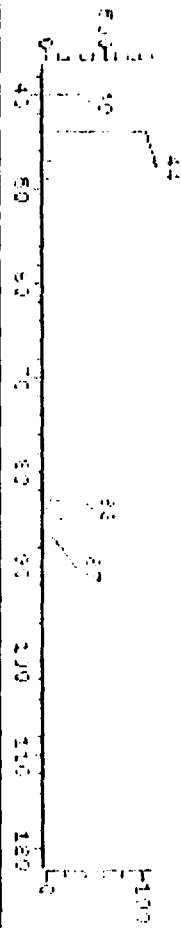
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File X0639 13550 H8987A DBF1E(3435,001,10) 32AM 317
Exp No 252 SUB 10.45 min.



SAMPLE SPECTRUM (UNSUBTRACTED)

File X0639 13550 H8987A DBF1E(3435,001,10) 32AM 317
Exp No 252 10.35 min.



Save File: 002725:02 Quant Output File: 002725:01

Name: 1580
Mass: 89887A DBF1E(3435,001,100) 21 Quant ID File: 1000L:EX
Start Time: 090413 14:12 Lost Calibration: 090413 11:27
Injected At: 090413 15:22

Compound No: 15
Compound Name: Chloroform
Scan Number: 517
Retention Time: 10.45 min.
Quant ID: 0510
Area: 2723
Concentration: 5.00 ug
Quality: 94

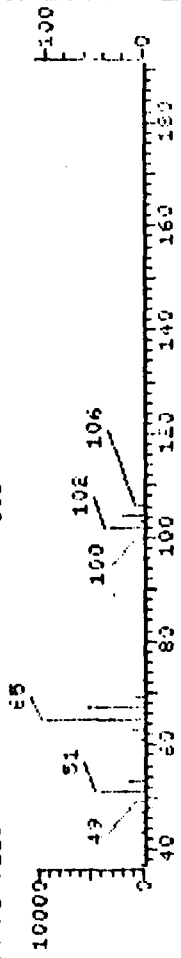
REFERENCE STANDARD SPECTRUM

File: \V02224 1,2-Dichloroethane d-4 (SURE) 080108 23:75 Scan 338
Bpk Ab 7525 SUB 11.59 min.



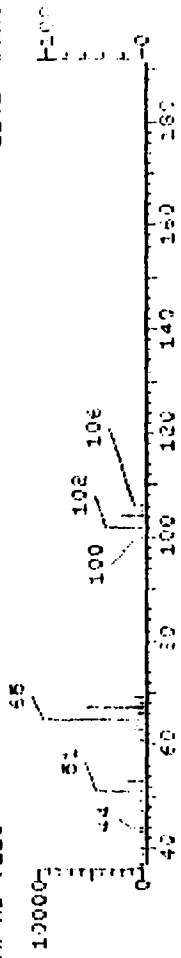
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File: \V02223 13530 HP59874 081E(3435.001.10 Scan 338
Bpk Ab 9216 SUB 11.24 min.



SAMPLE SPECTRUM (UNALYSED)

File: \V02223 13530 HP59874 081E(3435.001.10 Scan 338
Bpk Ab 9216 SUB 11.24 min.



Data File: >V02323::DZ

Quant Output File: \V02323::D1

Name: 13530

Misc: HP59874 081E(3435.001.100)P1-

Quant Time: 890418 14:12

Quant ID File: TQM1:42X

Injected at: 890418 13:22

Last Calibration: 890413 11:29

Compound No: 15

Compound Name: 1,2-Dichloroethane-d4

Scan Number: 338

Retention Time: 11.24 min.

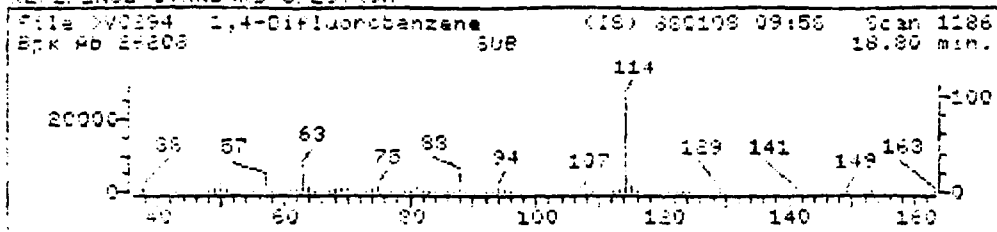
Quant Ion: 65.0

Area: 106924

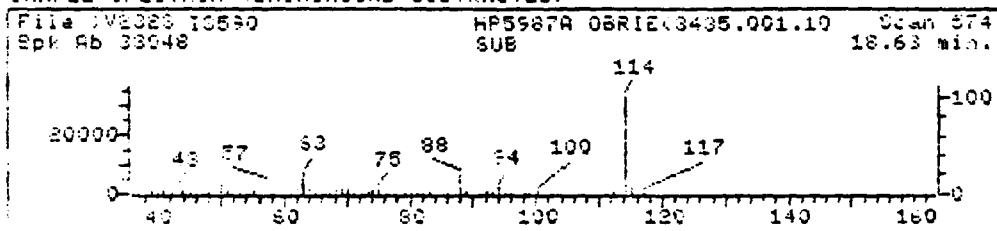
Concentration: 111.95 NG

q-value: 97

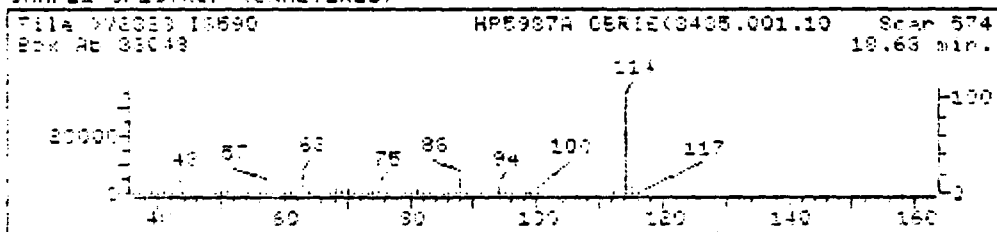
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Jobs File: >V0293::D2

Quant Output File: ^V0293::D1

Name: 13590

Inst: HP5987A 081E(3435.001.10)P1

Quant Time: 090418 14:12

Quant ID File: IDVML:EX

Injected at: 090418 13:22

Last Calibration: 090418 11:20

Compound No: 18 (ISTD)

Compound Name: 1,4-Difluorobenzene

Scan Number: 574

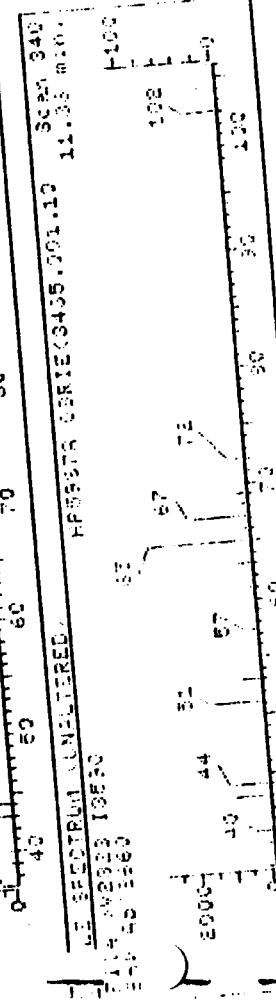
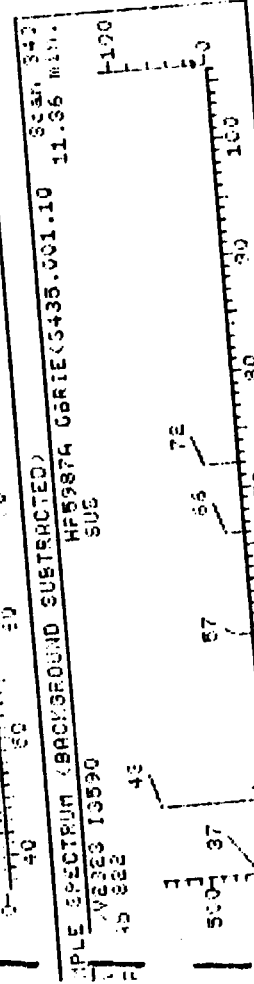
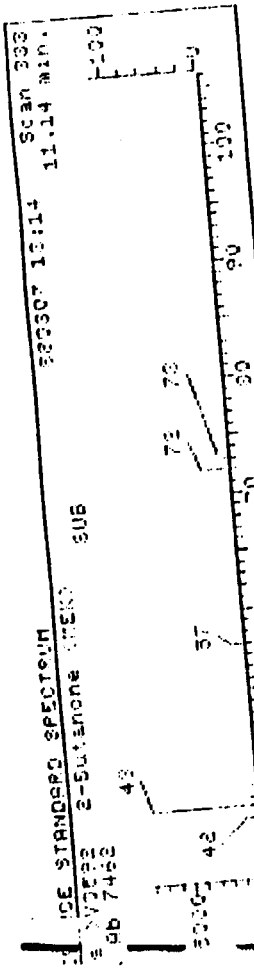
Retention Time: 18.63 min.

Quant Ion: 114.0

Area: 589015

Concentration: 250.00 NG

alpha: 100



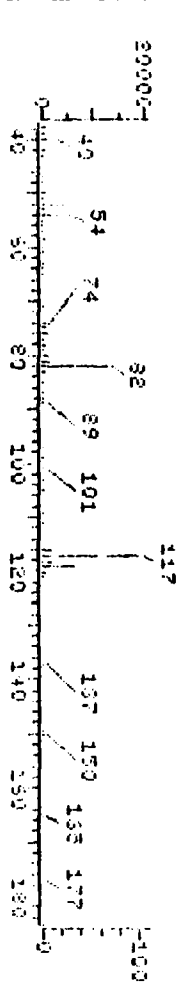
Quant Output File: #V2523:01

Data File: #V2523:02
 Name: 13790
 Misc: #P59876 GRIE(3435.001.10)P1 Quant ID File: 100ML.DEX
 Quant Time: 200419 14:12 Last Calibration: 200419 11:29
 Injected at: 890419 13:22

Compound No: 19.
 Compound Name: 2-Butanone
 Scan Number: 340
 Retention Time: 11.36 min.
 Quant Ion: 73.0
 Area: 1922
 Concentration: 27.96 NG
 q-value: 94

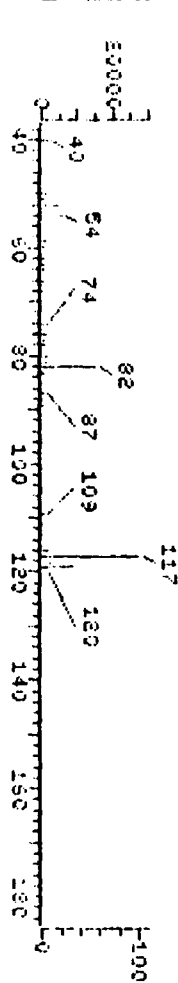
REFERENCE STANDARD SPECTRUM

File: W02323 CHLOROBENZENE d-5 SUB (15) 03103 09:58 Scan 729
SPK AB 15024 23.45 min.



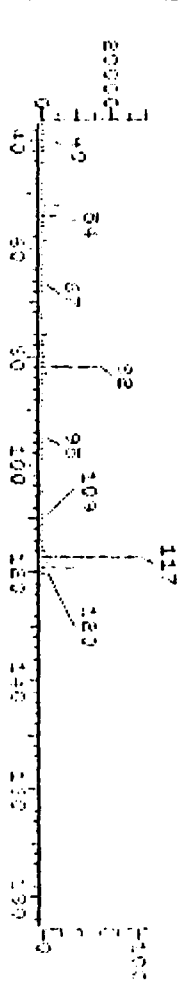
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File: W02323 13590 HPS987A SERIE(3435.001.10 Scan 729
SPK AB 27320 SUB 23.45 min.



SAMPLE SPECTRUM (UNALTERED)

File: W02323 13590 HPS987A SERIE(3435.001.10 Scan 729
SPK AB 27320 SUB 23.45 min.



Date Time: 202325:02

Quant Output File: W02325:10.

Name: 25710

File: HPS987A SERIE(3435.001.100)F1

Quant Time: 390418 14:12

Quant ID File: 100ML:63

Injected At: 050418 13:22

Last Calibration: 090418 11:07

Compound No: 52 (1STD)

Compound Name: Chlorobenzene-d5

Scan Number: 129

Retention Time: 23.45 min.

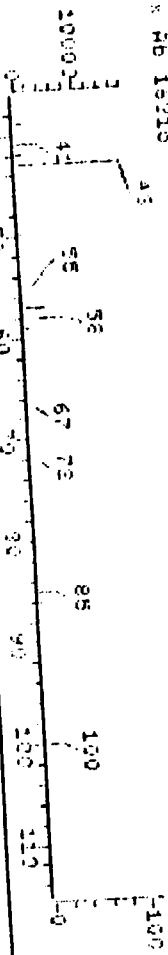
Quant 1071.117.0

Area: 156240

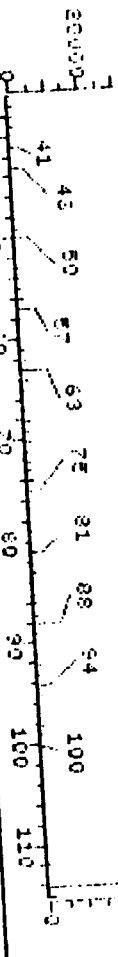
Concentration: 250.00 NG

Stuvalue: 50

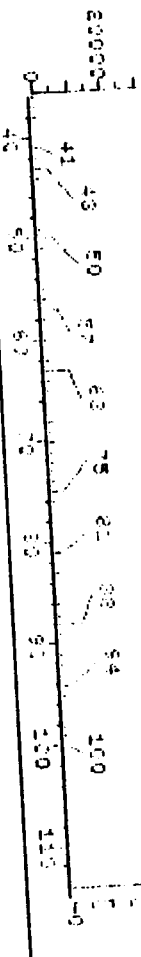
REFERENCE STANDARD SPECTRUM
-119-V00932 4-Methyl-2-pentanone (MISO) 900307 13:14 Scan 573
APX No 16215 SUB 19.14 min.



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)
File: V02323 13590 HP5987A CERIE\3435.001.10 Scan 573
19.60 min.
PKR No 63150 SUB



SAMPLE SPECTRUM (UNFILTERED)
File: V02323 13590 HP5987A CERIE\3435.001.10 Scan 573
19.60 min.
PKR No 63150 SUB



Data File: V02323:02

Quant Output File: V02323:01

Name: 17590
11:50: HP5987A CERIE\3435.001.100:01
Quant ID File: 100ML:02
11:50: HP5987A CERIE\3435.001.10
Quant Time: 6:04:18 14:12
Scan 573
11:50: HP5987A CERIE\3435.001.10
Quant Time: 6:04:18 14:12
Scan 573
11:50: HP5987A CERIE\3435.001.10
Quant Time: 6:04:18 14:12
Scan 573
11:50: HP5987A CERIE\3435.001.10
Quant Time: 6:04:18 14:12
Scan 573
11:50: HP5987A CERIE\3435.001.10
Quant Time: 6:04:18 14:12
Scan 573
11:50: HP5987A CERIE\3435.001.10
Quant Time: 6:04:18 14:12
Scan 573
11:50: HP5987A CERIE\3435.001.10
Quant Time: 6:04:18 14:12
Scan 573

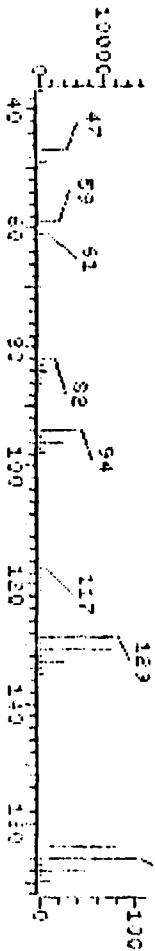
Compound No: 573
Compound Name: 4-Methyl-2-pentanone
Scan Number: 573
Retention Time: 19.60 min.
Quant Time: 43.0
Area: 217.5M
Concentration: 59.12 MG
g-value: 55

REFERENCE STANDARD SPECTRUM

File V05890 Tetrachloroethane SUB

620307 11:14

Scan 561
21.01 min.
166

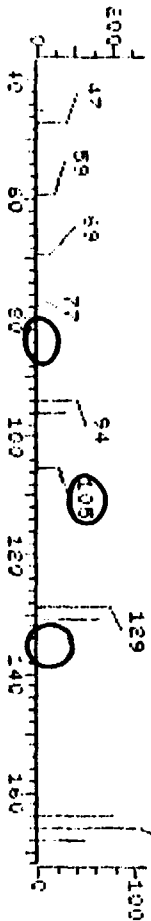


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File V02323 13690 SUB

HP5987A OBR1E(3485.001.10

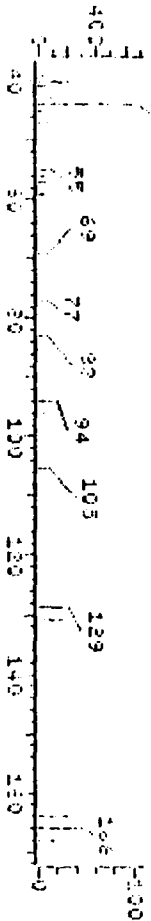
Scan 557
21.61 min.



SAMPLE SPECTRUM (UNFILTERED)

File V02323 13690 HP5987A OBR1E(3485.001.10

Scan 557
21.61 min.



Data File: V02323:102

Quant Output File: V02323:101

Name: 13690

Sample: HP5987A OBR1E(3485.001.100)F1

Start Time: 690-15 14:12

Quant ID File: 13041162

Injected at: 890418 15:22

Last Calibration: 890418 11:29

Concound No: 59

Compound Name: Tetrachloroethene

Scan Number: 457

Retention Time: 21.21 min.

Quant LUM: 364.6

Area: 1920

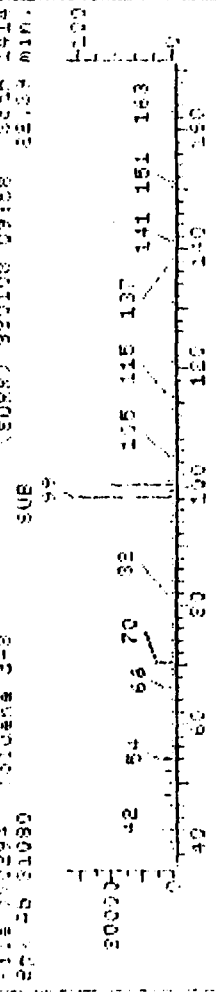
Concentration: 4.25 NG

q-value: 95

X

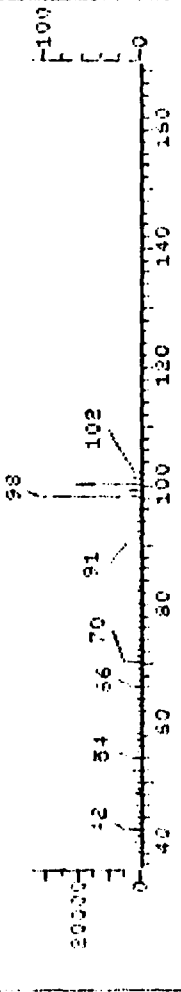
REFERENCE STANDARD SPECTRUM

File: \V23234 Toluene 3-3
 SP: 25 31080



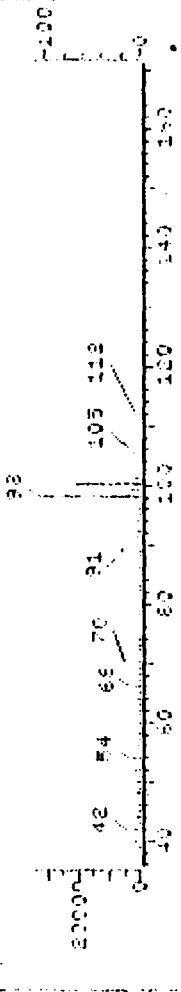
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File: \V2323 13550
 BPr PS 31016



SAMPLE SPECTRUM (UNALTERED)

File: \V2323 13550
 SP: 25 31055



Date File: \V2323:02

Quant Output File: \V2323:01

Name: 13290

Also: RP2987A CERIE(3435.001.100)P1

Quant Time: 890+18 14:12

Quant ID File: 120ML:EX

Injected at: 890+18 13:22

Last Calibration: 120418 11:00

Compound No: 37

Compound Name: Toluene-d8

Scan Number: 670

Retention Time: 22.24 min.

Quant Ion: 95.0

Area: 284990M

Concentration: 210.65 NG

q-value: 100

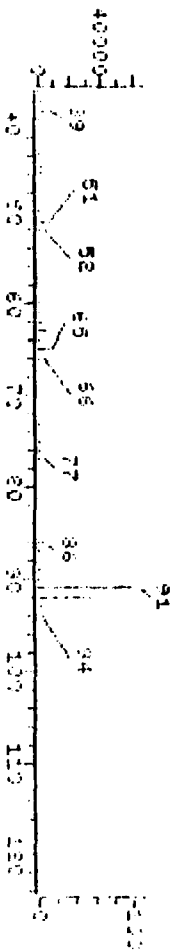
REFERENCE STANDARD SPECTRUM

File: V02231 Toluene
SPK NO: 7545

SUB

020307 12:17

Scan 696
22.42 min.

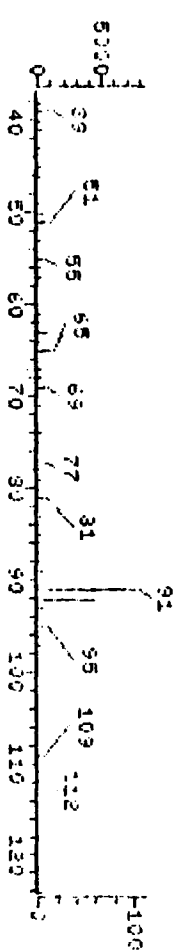


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File: V02231 13530
SPK NO: 7545

HP6967A DBRIE(3435.001.10
SUB

Scan 696
22.42 min.

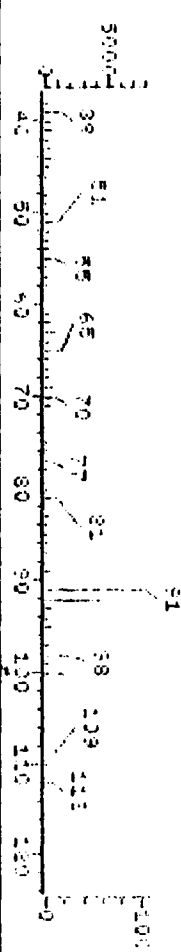


SAMPLE SPECTRUM (UNALTERED)

File: V02231 13530
SPK NO: 7545

HP6967A DBRIE(3435.001.10
SUB

Scan 696
22.42 min.



Data File: V02225:102

Quant Output File: V02225:101

Run#: 13530

File: HP6967A DBRIE(3435.001.100)P1

Quant Time: 090413 14:12

Quant ID File: 105012:6

Injected at: 090418 15:22

Last Calibration: 090413 11:20

Compound No: 30

Compound Name: Toluene

Scan Number: 673

Retention Time: 22.42 min.

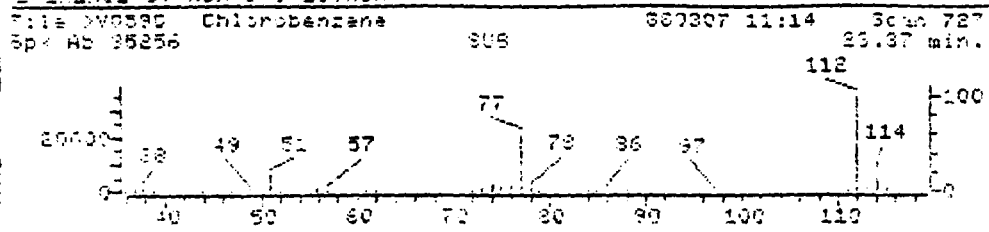
Quant Lch: 7210

Area: 54037

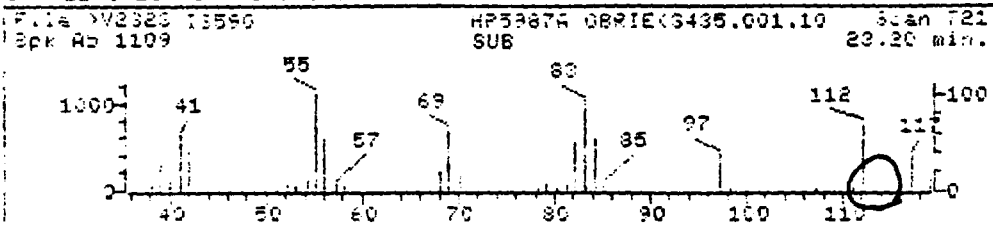
Concentration: 47.50 ug

g-value: 98

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: 002323::D2

Quant Output File: 002323::D1

Name: 13590

File: HP5987A DBRIE(S435.001.10)P1

Quant Time: 890418 14:12

Quant ID File: IDUML:EX

Injected at: 890418 13:22

Last Calibration: 890418 11:29

Compound No: 39

Compound Name: Chlorobenzene

Scan Number: 721

Retention Time: 23.20 min.

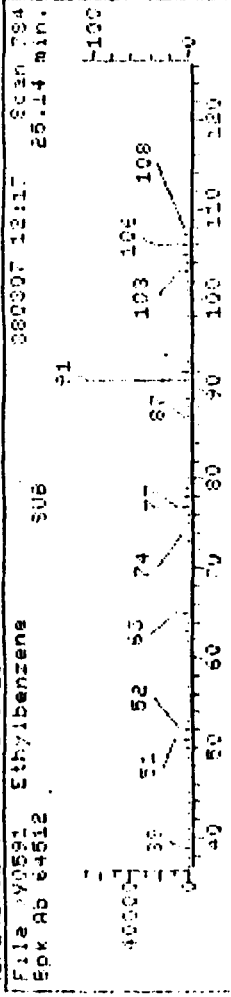
Quant Ion: 112.0

Area: 10678M

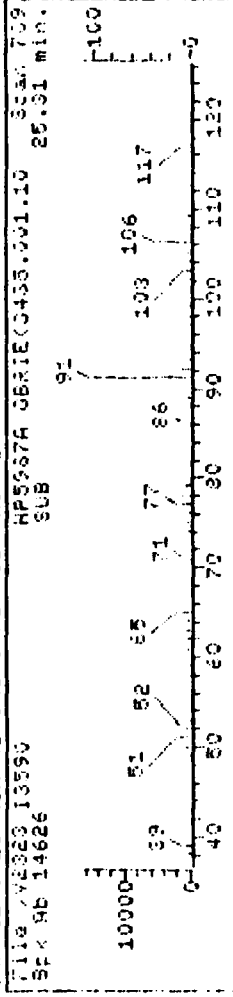
Concentration: 7.73 NG

q-value: 85

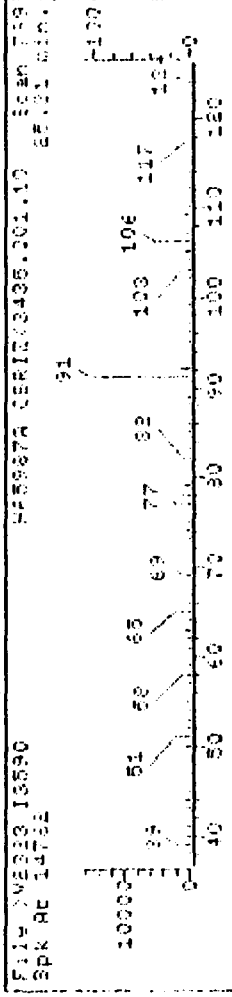
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >V2323:02

Quant Output File: V2323:01

Name: I5590

Misc: HF5987A CBRIE(5435.001.100)P1

Quant Time: 990418 14:12

Quant ID File: IDUKL:5K

Injected at: 990418 13:22

Last Calibration: 990418 10:29

Compound No: 40

Compound Name: Ethylbenzene

Scan Number: 789

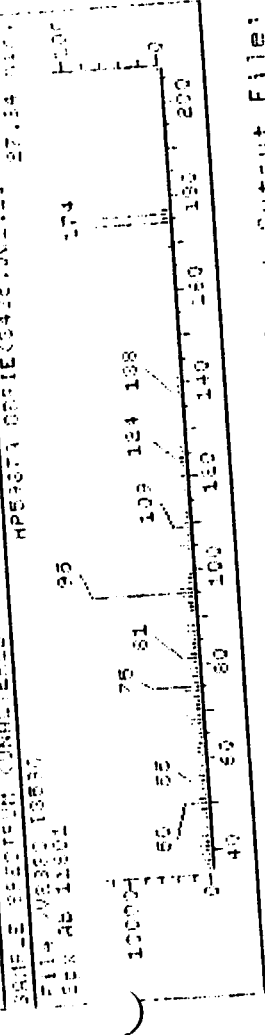
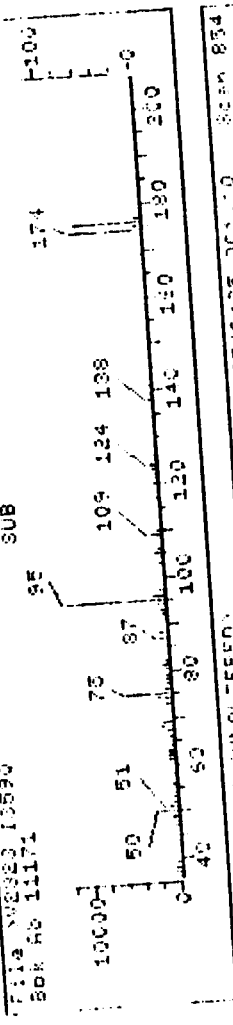
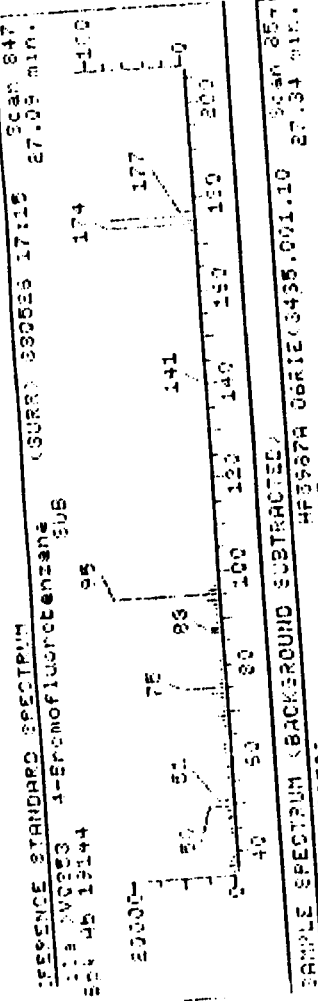
Retention Time: 25.31 min.

Quant Ion: 106.0

Area: 59105

Concentration: 92.07 NG

Quality: 91

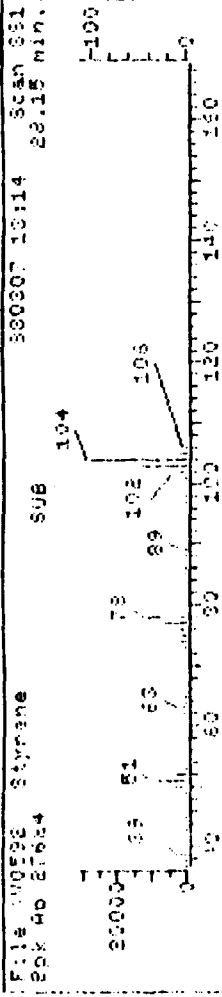


Quant Output File: ^U2323:01

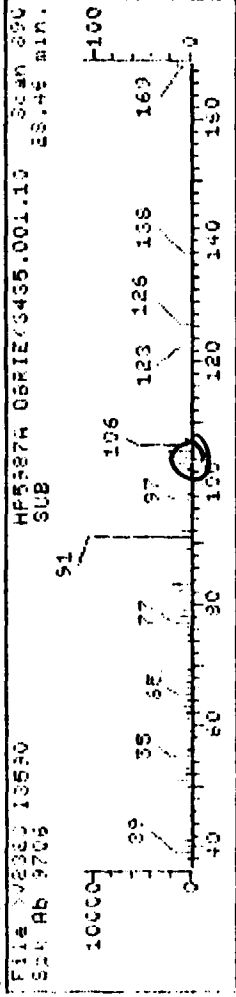
Data File: ^U2323:02
 NAME: 13590
 FILE: HPE3374 06R1E(3435.001.10)P1
 QUANT IS FILE: 100ML:03
 QUANT TIME: 890418 14:12
 LAST CALIBRATION: 890418 11:29
 INJECTED AT: 890418 13:22

Compound No: 41
 Compound Name: Bromofluorobenzene
 Scan Number: 374
 Retention Time: 27.34 min.
 Quant Ion: 95.0
 Area: 151009M
 Concentration: 222.67 NG
 Quality: 56

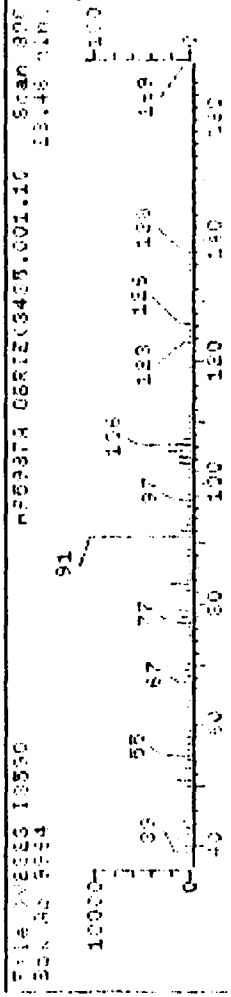
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNFILTERED)



Data File: 002323:D2

Quant Output File: 002323:01

Name: 13530

Misc: HP5887A 08A12(3435.001.100)P1

Quant Time: 890418 14:12

Quant ID File: 100ML:EX

Injected at: 890418 13:22

Last Calibration: 890-10 11:27

Compound No: 42

Compound Name: Styrene

Scan Number: 397

Retention Time: 20.46 min.

Quant Ion: 104.0

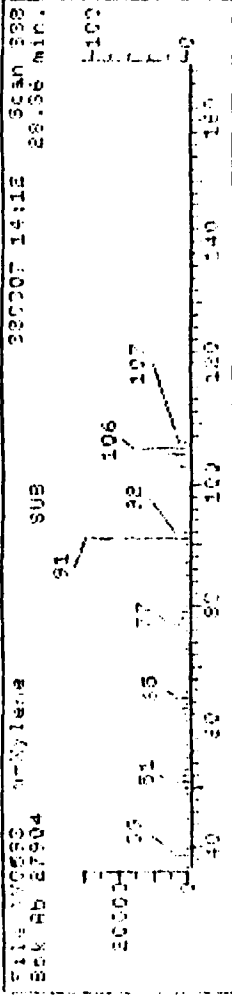
Area: 24509H

Concentration: 16.77 NG

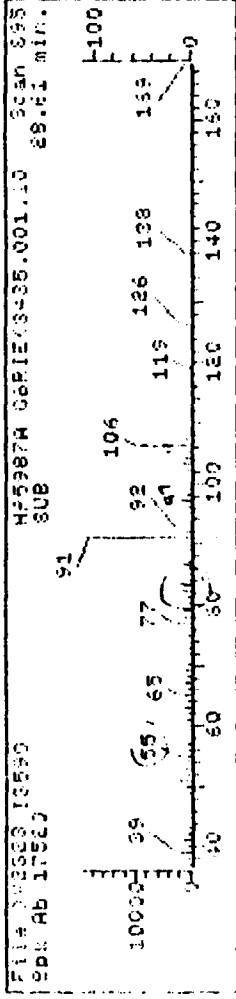
q-value: 42

X

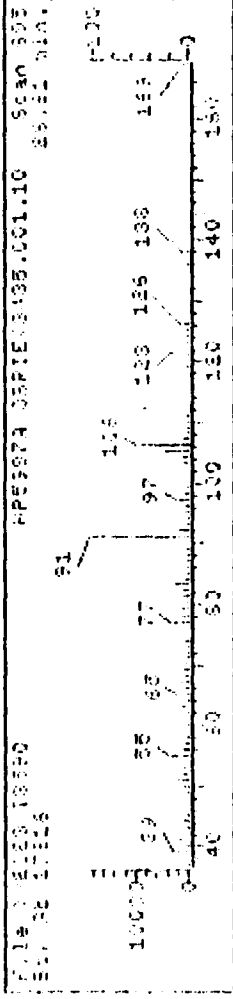
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNFILTERED)



Data File: W02523:D2

Name: 13590

Misc: MF5987A 08FIE(3435.001.100)P1

Suent Time: 870418 14:12

Injected at: 870413 13:22

Quant Output File: W02323:D1

Quant ID File: IDVNL:03

Last Calibration: 890418 11:29

Compound No: 45

Compound Name: m-xylene

Scan Number: 898

Retention Time: 28.61 min.

Quant Ions: 106.0

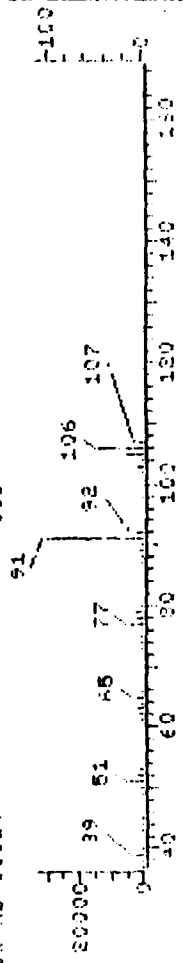
Area: 166836M

Concentration: 175.07 NG

q-value: 92

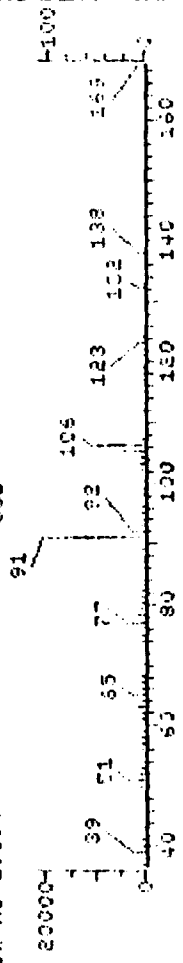
REFERENCE STANDARD SPECTRUM

File: X00922 0- and p-Xylene SUB 880307 13:14 Scan 910
 SPK AB 30024 29.05 min.



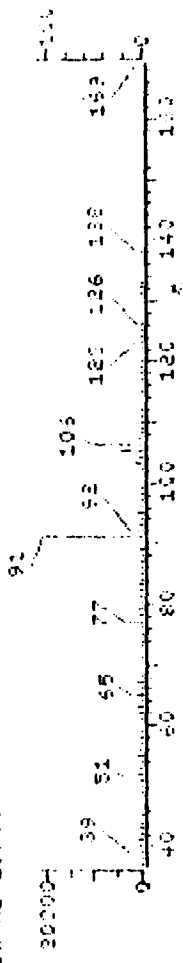
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File: X00922 13590 4P89979 06PIE(3455.001.10 Scan 916
 SPK AB 19394 SUB 29.33 min.



SAMPLE SPECTRUM (UNFILTERED)

File: X00922 13590 4P89979 06PIE(3455.001.10 Scan 919
 SPK AB 19744 SUB 29.33 min.



Data File: 202525:02

Quant Output File: 202525:01

Name: 13590

Misc: HF57875 02PIE(3435.001.100)PI

Scan Time: 290416 14:12

Quant ID File: 109ML:EX

Injected at: 290418 13:22

Last Calibration: 290416 11:25

Compound No: 44

Compound Name: Xylene (total)

Scan Number: 710

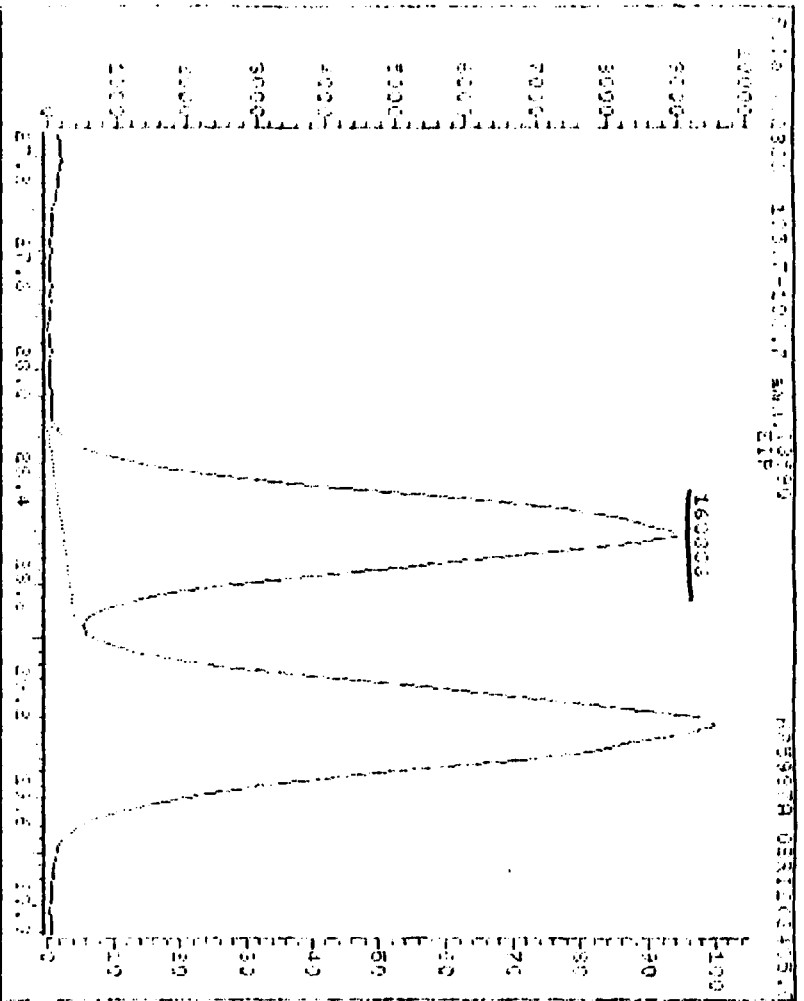
Retention Time: 29.33 min.

Guest Ion: 106.0

Area: 109971M

Concentration: 2+0.78 NG

q-value: 91



Data File: \001123:1122 Quant Output File: \001123:01
 Name: 15090
 File: MP5587A.CBRTIC(5435.061.100).PI Quant ID File: 101011:01
 Quant Time: 870418.14:12 Last Calibration: 870419 14:29
 Injected at: 870419 13:22
 Compound No: 45
 Compound Name: m-Xylene
 Scan Number: 957
 Retention Time: 28.61 min.
 Peak at: 28.61 min
 Area: 160326
 Concentration: 173.03 mg
 Multiplier: 92

This report was produced by GAREN on: 890425 15:51

data file header from : >U2323

Sample: I3590 Operator: KAREN MS 4/15/89 13:22
Sec : HP5987A DBRIE(3435.001.100)P1
Sps. #: 1 MS model: 87 SW/HW rev.: IA ALS #: 0
Method file: CLP00A Tuning file: MT8718 No. of extra records: 2
Source temp.: 200 Analyzer temp.: 220 Transfer line temp.: 220

Chromatographic temperatures : 45. 220. 0. 0. 0.
Chromatographic times, min. : 3.0 15.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 6.0 0.0 0.0 0.0 0.0

>U2323 I3590 HP5987A DBRIE(3435.001.100)P1
35.01 230.0 CLP ADC TIC
Slope: .01 Area Reject: 53040. Max Peaks: 10 Bunching: 1
Onslope: -.01 Results File IU2323 Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	24.83	761	775	798	11265	806674	512958	25.07	5.004
2	26.65	819	832	836	9130	472502	185444	8.34	2.175
3	28.93	936	842	978	10481	1454096	525935	25.62	6.048
4	30.39	936	932	956	18127	935057	450360	19.35	4.952
5	30.67	956	931	986	17805	1351093	453368	20.59	5.019
6	31.92	986	1001	1017	23097	1594191	623127	28.03	7.174
7	33.41	1023	1049	1063	59000	3520417	2030522	91.54	23.309
8	34.50	1066	1084	1114	53383	3719486	2225009	100.00	25.595
9	37.37	1157	1176	1194	11799	1756175	493385	22.42	5.738
10	38.11	1207	1252	1256	22178	2894007	1203494	34.14	13.037

Sum of corrected areas: 2685350.

Summary of Unknowns PBM Library Search and Quantitation

Standard	Concentration	Area	Retention Time	Unknown Window
1	250.0	530399.	8.44	1.83 - 15.84
2	250.0	983746.	19.63	15.84 - 21.04
3	250.0	1095738.	23.45	21.04 - 39.05

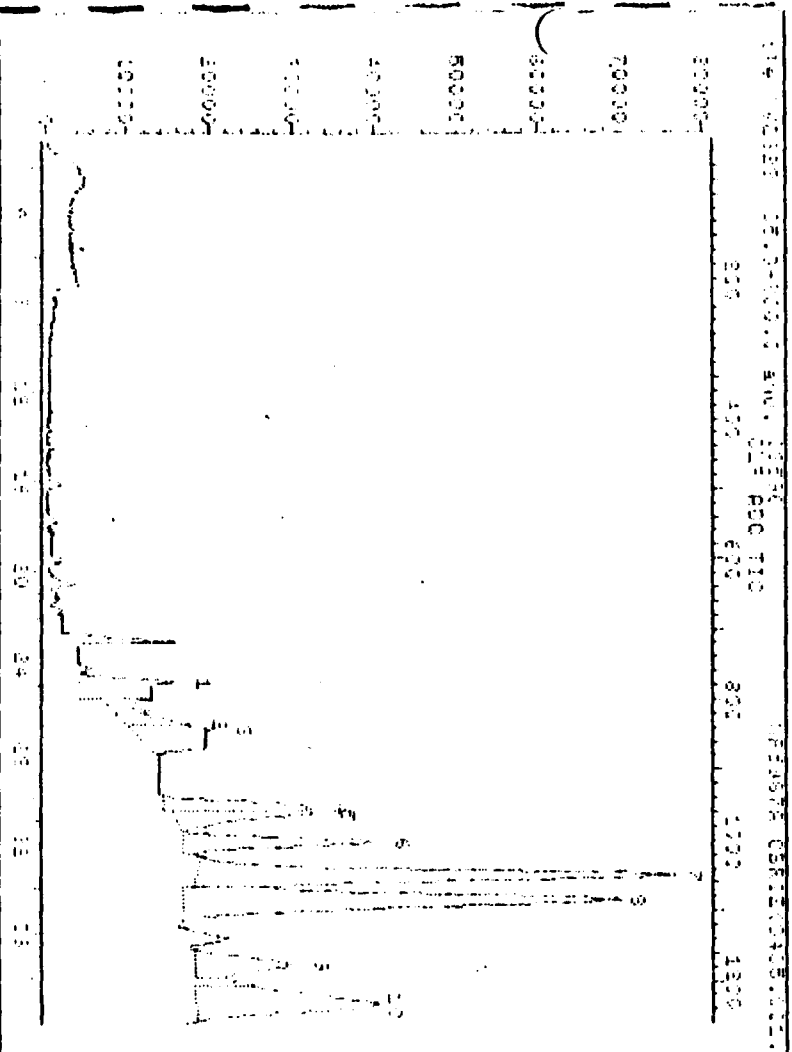
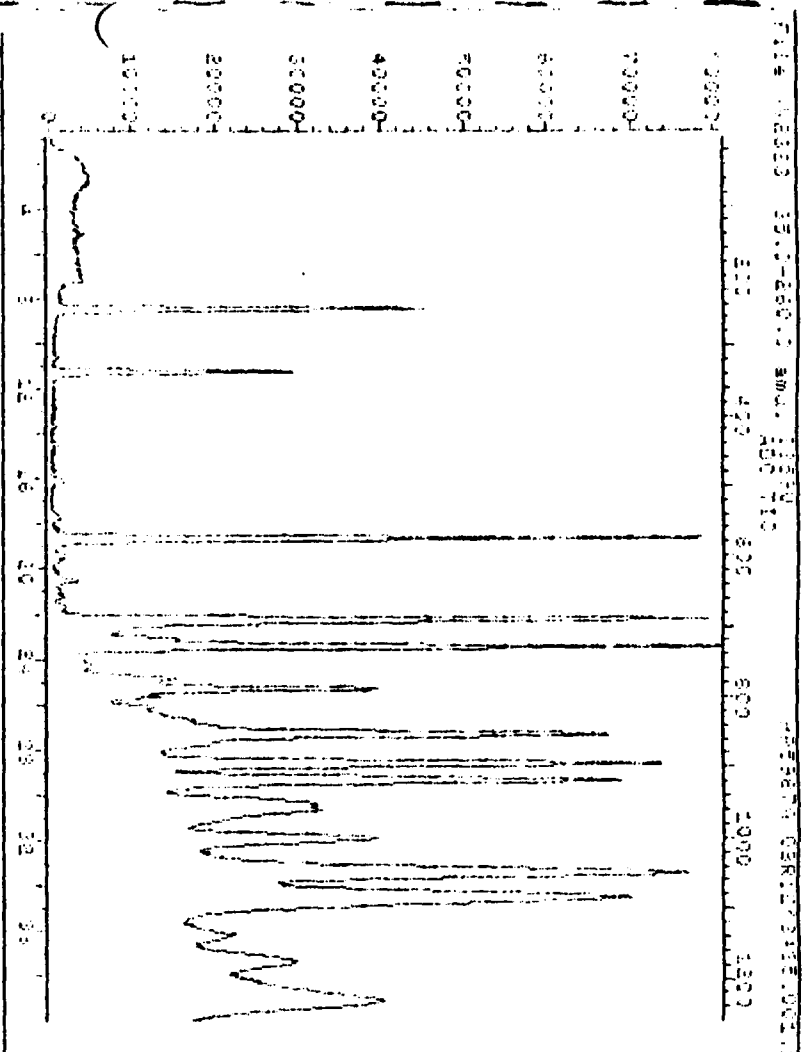
Dilution Factor (DF) = 1.00 Fractional Solids (FS) = 1.00
Amount Method (AM) = 1000.00 Amount Used (AU) = 1000.00

Correction Factor = 1.00 = (AM / AU) / (DF * FS)

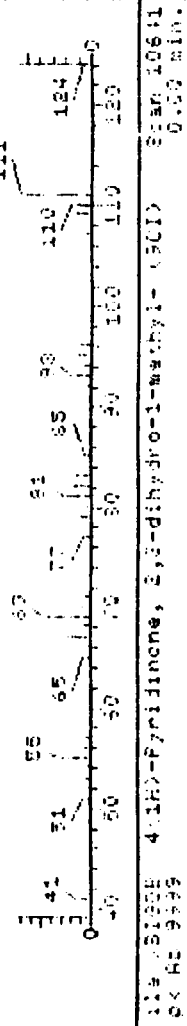
Unknown Concentration = $\frac{\text{Conc Int Std}}{\text{Area Int Std}} * \text{Area Unk} * \text{Correction Factor}$

4:48 PM THU., 27 APR., 1989

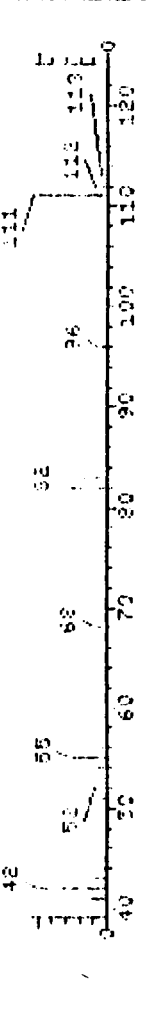
$$\text{Factor} = \frac{10000}{100} = \frac{4.0321(1.0000)(0.521)}{47.60} \cdot 83$$



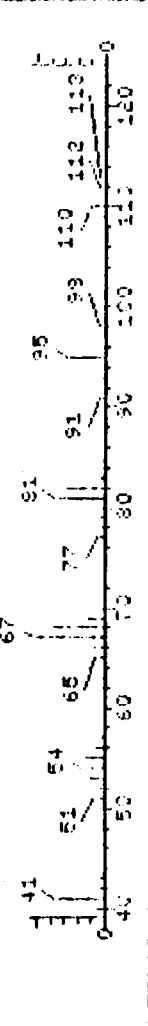
File # 81908 10641
PK AB 9899
CUB ASD GVC
Scan 10641
0.100 min.



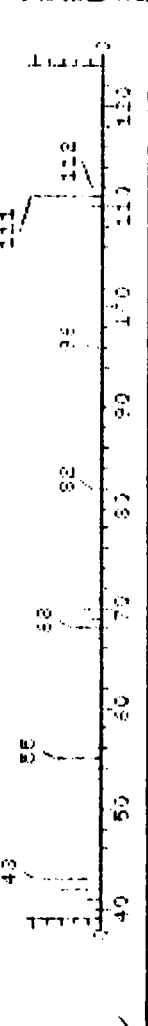
File # 81908
PK AB 9899
4(1H)-Pyridinone, 2,3-dihydro-1-methyl- (9CI)
Scan 10641
0.100 min.



File # 81908
PK AB 9899
Bicyclo[2.2.1]heptane, 2-methyl-, exo- (9CI)
Scan 8291
0.100 min.



File # 81908
PK AB 9899
Oxazole, trimethyl- (8CI9CI)
Scan 10640
0.100 min.



Unknown #:

Area = 512950.0 Tentative Concentration is 110.00

- 1. 4(1H)-Pyridinone, 2,3-dihydro-1-methyl- (9CI) 111 684989
- 2. Bicyclo[2.2.1]heptane, 2-methyl-, exo- (9CI) 110 63418
- 3. Oxazole, trimethyl- (8CI9CI) 111 661981
- 4. Bicyclo[2.2.2]octane (8CI9CI) 110 63414
- 5. 3,4-Octadiene, 7-methyl- (9CI) 104 67016
- 6. 3-Octyne, 2-methyl- (9CI) 112 69416
- 7. Bicyclo[2.2.1]octane (8CI9CI) 110 66616

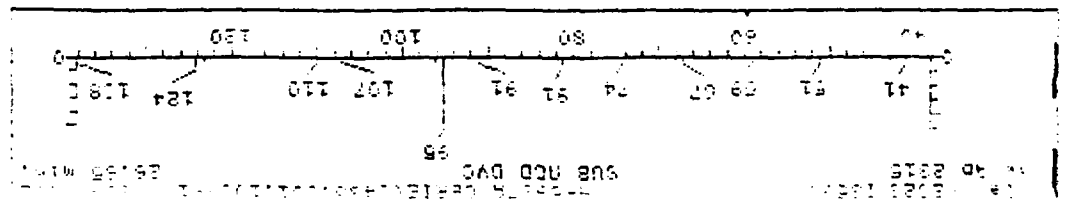
Sample file: >U2323 Spectrum #: 775
Search speed: 3 Tilting option: N No. of ion ranges searched: 1

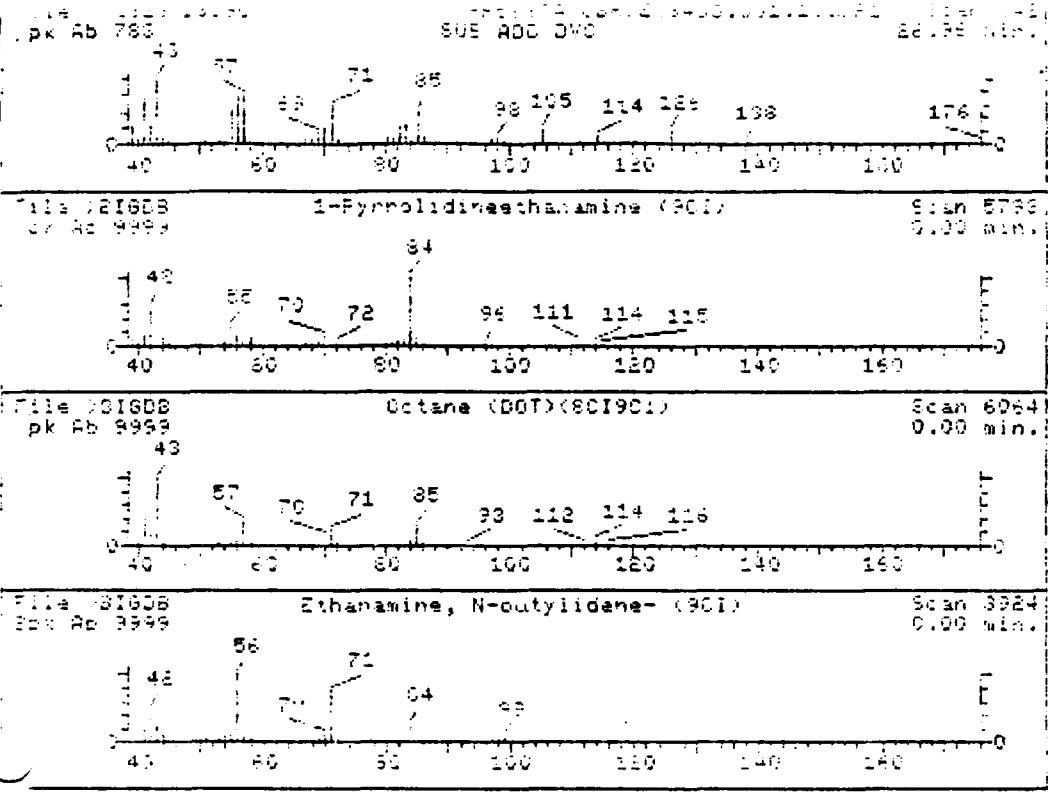
Prob.	CAS #	CON #	ROOT	K	DK	#ELS	TILT	X	CON	CL	...
1.	20*	35488007	10641	"B1908	27	77	3	0	91	53	...

No data base entries were retrieved.

Sample #11: 002303 Spectrum #: 032

Unknown #12
EA = 1834410 Tentative Concentration is 42.00



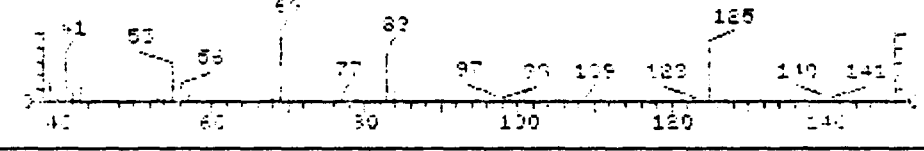
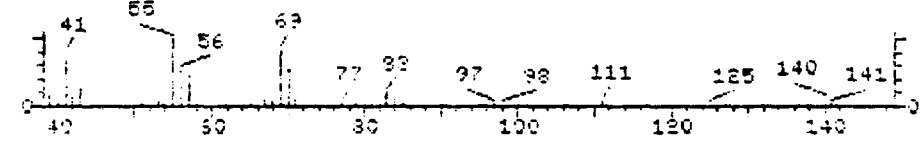
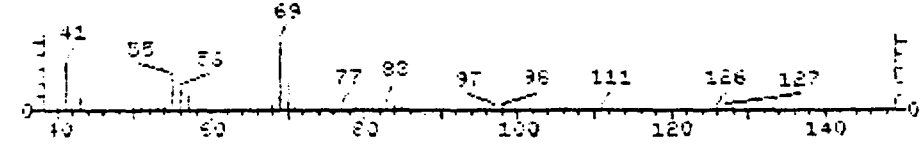
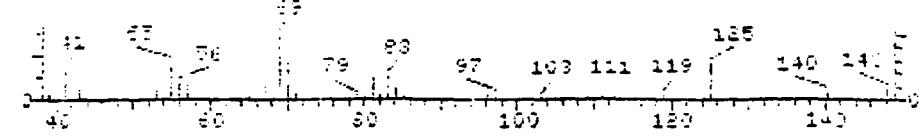


Unknown #, #
 Area = 525085.0 Tentative Concentration is 120.00

- 1. 1-Pyrrolidinemethanamine (90I) 114 05H10M2
- 2. Octane (DOT)(80I90I) 114 08H10
- 3. Ethanamine, N-butylidene- (90I) 71 05H10M2
- 4. Azetidene, 1-methyl- (80I90I) 71 04H10M
- 5. Ethane, isocyanato- (90I) 71 05H10M2
- 6. 4-Piperidinemethanamine (90I) 114 08H10M2
- 7. Cyclopropane, 1-methyl-2-pentyl- (90I) 128 09H10

Sample file: 402325 Spectrum #: 842
 Search speed: 3 Tilting option: N No. of ion ranges searched: 7

Peak	Rel. Int.	CAS #	CON #	ROOT	%	DK	#PLG	TILT	Δ	CON	C_I	R_10
1.	56*	7154736	5793	"B1GDB	31	68	3	0	536	18	14	10
2.	57*	111659	6064	"B1GDB	52	41	2	0	173	47	11	14
3.	25*	1311127	3924	"B1GDB	37	98	1	0	54	49	7	10
4.	25*	4923799	3893	"B1GDB	54	67	3	0	155	44	8	10
5.	17*	109900	5880	"B1GDB	10	53	0	0	74	80	7	10
6.	33*	7144050	11341	"B1GDB	56	78	2	0	71	48	7	10
7.	17*	41977571	13216	"B1GDB	31	80	3	0	62	47	7	10



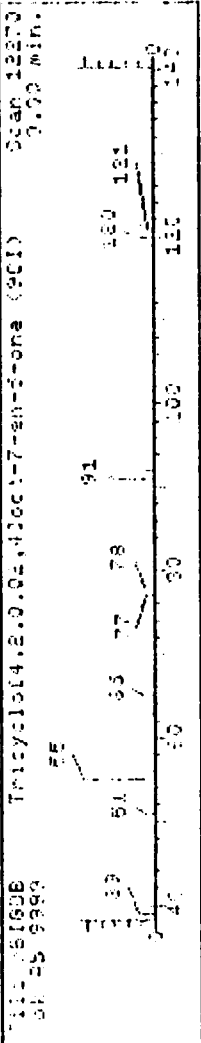
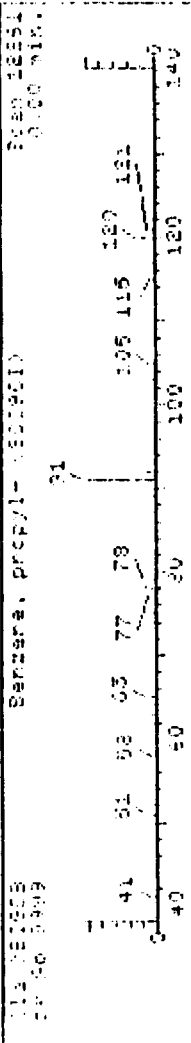
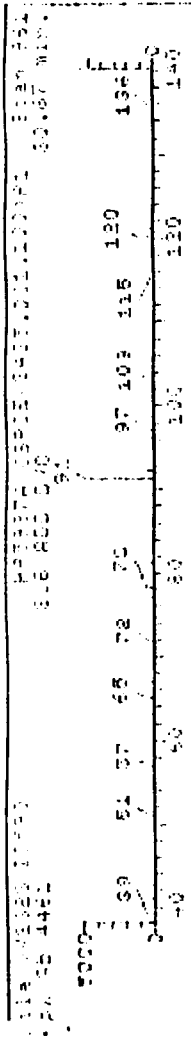
Unknown #.4

Area = 450060.0 Tentative Concentration is 93.00

- | | | |
|--|-----|--------|
| 1. 1-Hexene, 3,3,5-trimethyl- (901) | 125 | 09410 |
| 2. 3-Octene, 2,5-dimethyl- (801901) | 140 | 010420 |
| 3. Cyclonexane, 1,1,3,5-tetramethyl-, trans- (901) | 140 | 010427 |
| 4. 1-Octene, 3,3-dimethyl- (901) | 140 | 010420 |
| 5. 5-Nonene, 2-methyl- (901) | 140 | 010420 |
| 6. Cyanamide, dimethyl- (801901) | 70 | CFH4N2 |
| 7. 3-Nonene, 5-methyl-, (E)- (901) | 140 | 010420 |

Sample file: >V2323 Spectrum #: 932
 Search speed: 5 Tilting option: N No. of ion ranges searched: 1

	Ratio	CAS #	CON #	ROOT	K	OK	#PLG	TILT	%	CON	C_I	S_I
1.	35%	15407435	3548	"81908	51	42	0	0	73	42	12	27
2.	16%	6374288	3747	"81908	52	36	1	0	50	54	3	27
3.	27%	50171313	12989	"81908	29	75	0	0	10	39	10	13
4.	16%	74511516	3575	"81908	34	72	1	0	73	41	3	14
5.	23%	58263533	1117	"81908	47	61	1	0	57	49	7	11
6.	23%	1467734	3306	"81908	32	51	1	0	100	48	7	13
7.	25%	63405411	3747	"81908	25	54	1	0	100	46	7	13



Area = 457035.0 Tentative Concentration is 100.00
 Unknown #, F

- 1. Benzene, Propyl- (90101) 120 9900
- 2. Tricyclo[4.2.0.0^{2,4}]oct-7-en-2-one (901) 120 9900

Sample Files: 002323 Spectrum #: 241
 Scan Speed: 3 Tilting option: N No. of Ion Pairs Acquired: 3

Prob.	CHS #	CON #	SCOT	I	SK	#PEP	TILT	A	CON	SCN	FILE
51%	122651	12251	12251	97	48	2	0	0	0	0	00
15%	56666735	12270	121608	99	13	1	0	0	0	0	00

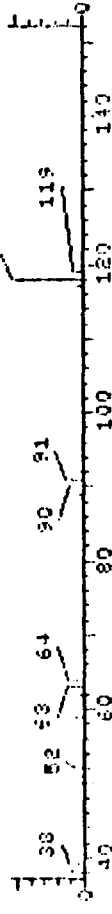
File 21922 13899
SUB RCD DVC
HP 8871 SERIE(3425.001.100)P1 1030 1204
21.92 min.



File 281508
SUB RCD 58995
Benzofuran (8019CI)
Scan 11977
0.00 min.



File 281508
SUB RCD 58995
2H-Cyclopentadienopyridazine (8019CI)
Scan 11975
0.00 min.



File 281508
SUB RCD 58995
1H-Indazole (8019CI)
Scan 11976
0.00 min.

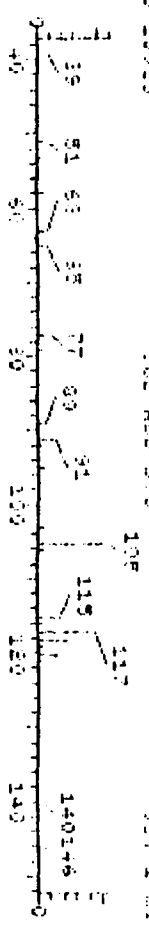


Area = Unknown #,9
Area = 625127.0 Tentative Concentration is 140.00

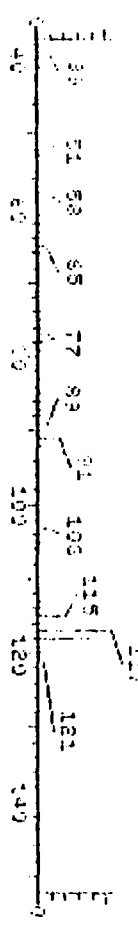
1. Benzofuran (8019CI)
 2. 2H-Cyclopentadienopyridazine (8019CI)
 3. 1H-Indazole (8019CI)
 4. 1H-Benzimidazole (901)
- 118 8019CI
118 8019CI
118 8019CI
118 8019CI

Sample file: 2U2523 Spectrum #: 1001 No. of ion ranges searched: 42
Search speed: 3 Tilting option: N

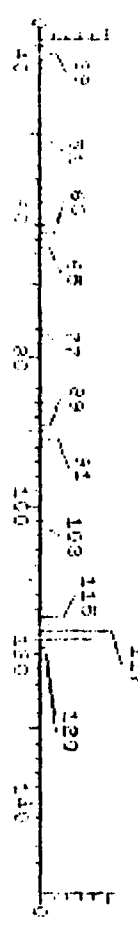
Prob.	CAS #	CON #	ROOT	K	OK	#ELS	TILT	CON	CLI	FLI
83*	271996	11977	"81G08	50	52	2	0	81	0	82
45*	270644	11975	"81G08	52	65	2	0	100	25	100
37*	271443	11976	"81G08	32	70	2	0	100	25	100
36*	51172	11969	"81G08	33	58	3	0	100	25	100



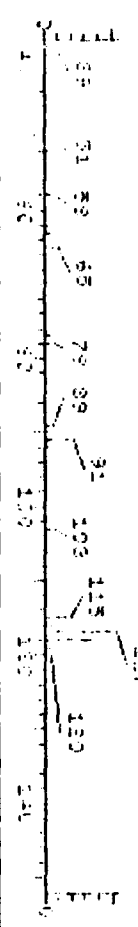
FILE 219025 10350 758816.001EVS485.J02.1107P1 3333 2075
 CRK NO 9899 Benzene, 1-ethenyl-2-methyl- (901) SCAN 11974
 0.00 MIN.



FILE 219025 10350 758816.001EVS485.J02.1107P1 3333 2075
 CRK NO 9898 1H-Indene, 6,5-dihydro- (901) SCAN 11979
 0.00 MIN.



FILE 219025 10350 758816.001EVS485.J02.1107P1 3333 2075
 CRK NO 9898 Benzene, 6-propenyl- (901) SCAN 11978
 0.00 MIN.



CONCENT: 817
 AREA = 1070522, Tentative Concentration is 490.00

- 1 Benzene, 1-ethenyl-2-methyl- (901) 615 09410
- 2 1H-Indene, 6,5-dihydro- (901) 115 10110
- 3 Benzene, 1-propenyl- (901) 115 09710
- 4 Benzene, 1,1'-(1-ethenyl)-1,3'-bipropenyl (901) 115 09710
- 5 Benzene, 1,1'-(1-methylethenyl)- (901) 120 09910
- 6 Benzene, 6-propenyl- (901) 115 09910
- 7 Benzene, 1-ethenyl-2-methyl- (901) 115 09910

Sample files: XUV2325 Spectrum #: 1035
 Search speed: 5 Tilting option: N No. of for ranges searched: 47

FILE	CRS #	CON #	ROOT	K	OK	#ELS	TILT	%	CON	ELL	...
1	71*	611154	11991	#81908	35	58	0	53	44	34	...
2	61*	496117	11979	#81698	67	55	1	57	41	33	...
3	41*	530572	11978	#81618	54	48	2	60	45	34	...
4	63	61141977	15001	#81666	76	55	0	56	40	34	...
5	51*	96629	12359	#81666	61	26	0	58	38	37	...
6	51*	376494	11286	#81668	70	40	0	59	36	37	...
7	51*	511145	12150	#81918	65	51	0	54	36	37	...

File > 02230900 HP3879 3891E(3-35,201,200)P1 Scan 12256
 12K AS 12258 SUR ROZ DVC 34.50 min.



File 01608 Benzene, 1-ethyl-2-methyl- (9CI) Scan 12256
 12K AS 9999 34.50 min.



File 01608 Benzene, 1-ethyl-4-methyl- (9CI) Scan 12253
 12K AS 9999 9.00 min.



File 01600 Benzene, (1-methylethyl)- (9CI) Scan 12257
 12K AS 9999 9.00 min.

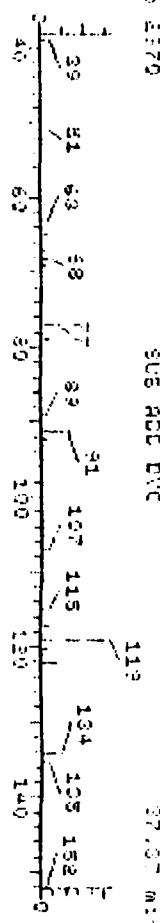


Unknown #12
 Peak = 223309. Tentative Concentration is 510.00

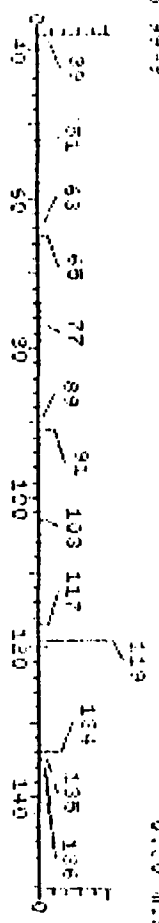
- 1. Benzene, 1-ethyl-2-methyl- (9CI) 120 60412
- 2. Benzene, 1-ethyl-4-methyl- (9CI) 120 60412
- 3. Benzene, (1-methylethyl)- (9CI) 120 60412
- 4. Benzene, 1-ethyl-3-methyl- (9CI) 120 60412
- 5. Benzene, 1,2,3-trimethyl- (6CI9CI) 120 60412
- 6. Benzene, (1,3-dimethyl-3-butenyl)- (9CI) 120 612415
- 7. Pyridine, 2-ethenyl- (9CI) 120 612415

Sample file: >02323 Spectrum #: 1084 No. of ion ranges searched: 1
 Search speed: 3 Tilting option: N

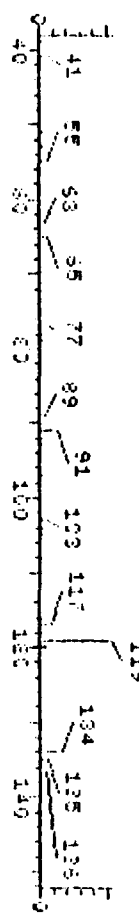
Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	CL	S_U
83*	611143	12242	"B10DB	64	21	2	0	34	9	54	50
83*	622968	12248	"B10DB	67	22	2	0	90	9	54	50
83*	99920	12259	"B10DB	64	23	0	0	66	7	54	50
83*	620144	12247	"B10DB	63	24	0	0	81	9	54	50
83*	525758	12090	"B10DB	50	50	0	0	55	27	54	50
83	8281315	9933	"B10DB	36	42	0	0	100	29	54	50
83*	100693	523	"B10DB	27	77	0	0	100	59	54	50



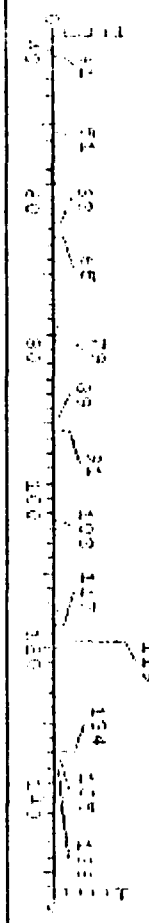
File 21170 Benzene, 1-methyl-3-(1-methylethyl)- (9CI) Scan 12170
 OK NO 9499 0.00 min.



File 21170 Benzene, methyl(1-methylethyl)- (9CI) Scan 12171
 OK NO 9499 0.00 min.



File 21170 Benzene, 1-methyl-2-(1-methylethyl)- (9CI) Scan 12159
 OK NO 9499 0.00 min.



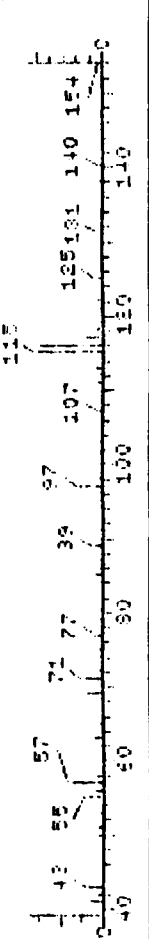
0.00000 H₂O
 4050510 Tentative Concentration is 111.00

- 1 Benzene, 1-methyl-3-(1-methylethyl)- (9CI) 154 110014
- 2 Benzene, methyl(1-methylethyl)- (9CI) 174 010014
- 3 Benzene, 1-methyl-2-(1-methylethyl)- (9CI) 154 110014
- 4 Benzene, 1-ethyl-2,4-dimethyl- (9CI) 174 010014
- 5 Benzene, (1,1-dimethylethyl)- (9CI) 154 010014
- 6 Benzene, 2-ethyl-1,3-dimethyl- (9CI) 154 010014
- 7 Benzene, 2-ethyl-1,4-dimethyl- (9CI) 154 010014

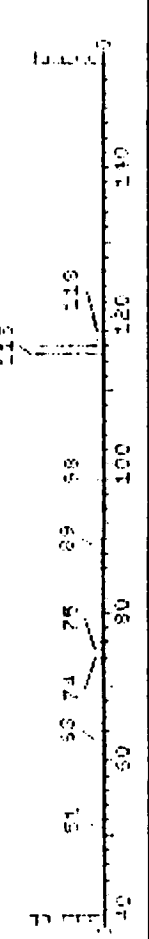
Sample files: 202523 Spectrum #: 1175
 Search speed: 3 Filtering option: N No. of ion ranges searched:

Proc.	CAS #	CON #	ROOT	K	OK	#PLG	TILT	R	CON	Q	FILE
1	67*	535773	12170	"BIGR	57	32	1	0	24	20	27
2	53*	2515151	12177	"BIG93	54	32	2	0	55	22	27
3	57*	527344	12159	"BIG08	52	40	3	0	100	15	27
4	53*	274419	12171	"31505	49	35	1	0	89	13	27
5	46*	95065	12167	"9160B	46	17	2	0	75	11	27
6	44*	127044	12174	"BIG03	45	42	3	0	78	13	27
7	43*	1758359	12181	"51503	46	43	3	0	71	11	27

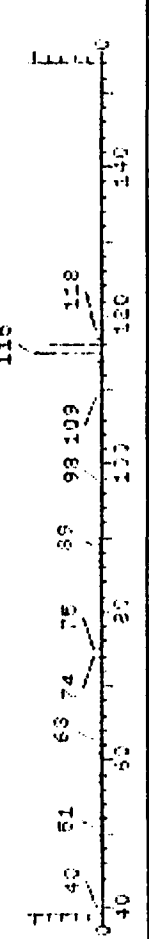
File # 11725 18590
PK AB 9999 SUB ADD CMC Scan 11725 0.00 min.



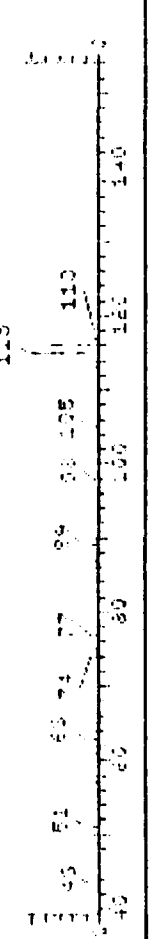
File # 81908
PK AB 9999 Benzene, 1-ethynyl-4-methyl- (9CI) Scan 11725 0.00 min.



File # 81908
PK AB 9999 Benzene, 1-propynyl- (9CI) Scan 11725 0.00 min.



File # 81908
PK AB 9999 Benzene, 1,2-propadienyl- (9CI) Scan 11725 0.00 min.



Unknown # 10
Area = 1205474. Tentative Concentration is 270.00

- 1. Benzene, 1-ethynyl-4-methyl- (9CI) 115 0.000
- 2. Benzene, 1-propynyl- (9CI) 115 0.000
- 3. Benzene, 1,2-propadienyl- (9CI) 115 0.000
- 4. 1H-Indene (9CI) 115 0.000
- 5. 1H-Indene, 1-chloro-2,3-dihydro- (9CI) 115 0.000

Sample file: >J2325 Spectrum #: 1252
Search speed: 3 Tilting option: N No. of ion ranges searched: 4

Scan	CHS #	CON #	ROOT	K	DK	#PG	TIME	CON	FILE
21*	756872	11727	"81908	67	17	0	0	0	0
24*	673326	11726	"81908	46	46	2	0	0	0
54*	2327993	11729	"81908	47	47	2	0	0	0
47*	95136	11724	"81908	55	43	1	0	0	0
26	3527529	11745	"81908	42	50	1	0	0	0

QUANT REPORT

Operator ID: KAREN
 Output File: U2330:01
 Data File: U2330:02
 Name: ISSVIRE

Quant Rev: 6 Quant Time: 890419 10:55
 Injected at: 890419 11:44
 Dilution Factor: 1.00000

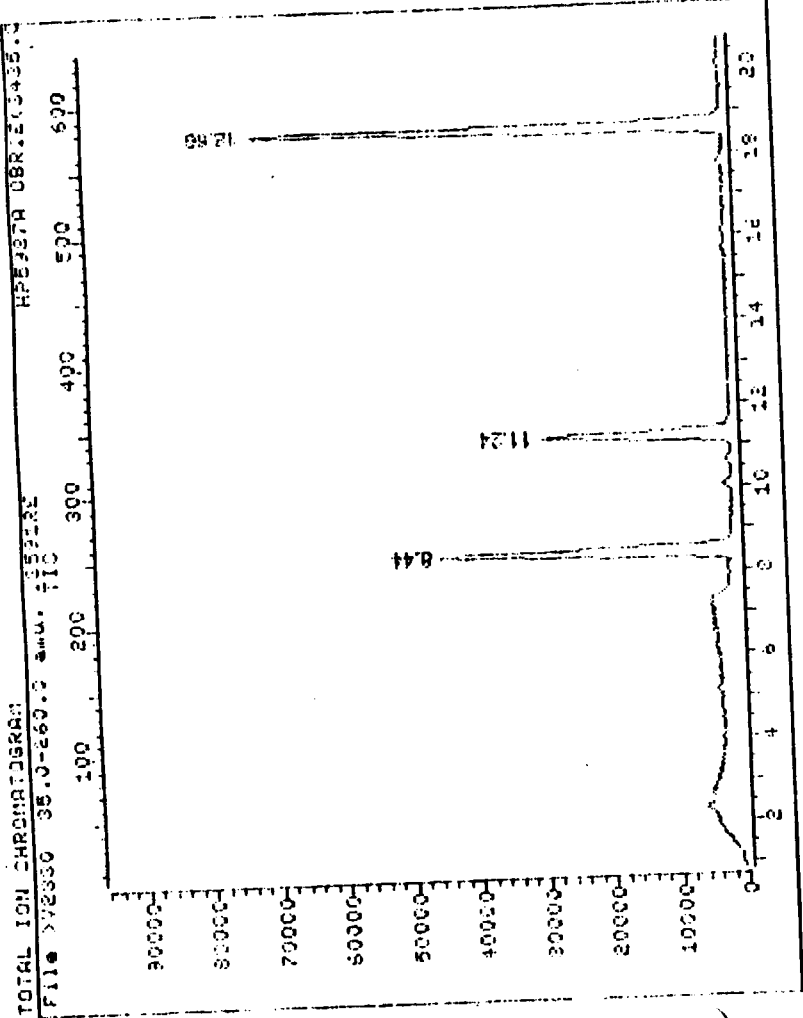
Disc: NP5287A OBRIE(3455.001.100)P1

IS File: ID.ML:EX
 Title: CLP V09 ID FILE (PACKED COLUMN)
 Last Calibration: 890419 10:55

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	8.44	128.0	81028	250.00	NG	59
✓4)	Vinyl Chloride	2.32	62.0	5939	11.58	NG	25
	Methylene Chloride	5.13	94.0	1613	5.07	NG	75
	Acetone	6.08	45.0	4721	16.84	NG	54
✓10)	1,2-Dichloroethene (total)	10.05	96.0	2971	5.99	NG	85
✓13)	Chloroform	10.61	83.0	3912	4.45	NG	90
15)	1,2-Dichloroethane-d4	11.24	65.0	106235	221.85	NG	26
18)	*1,4-Difluorobenzene	19.66	114.0	371526M	250.00	NG	100
✓19)	2-Butanone	11.36	72.0	1212	20.04	NG	98
22)	*Chlorobenzene-d5	23.45	117.0	324275M	250.00	NG	98
✓25)	Tetrachloroethene	21.24	134.0	7986	12.01	NG	95
27)	Toluene-d8	22.23	98.0	399372	237.20	NG	104
✓38)	Toluene	22.42	92.0	5476	5.22	NG	84
41)	Bromofluorobenzene	27.34	95.0	185706	224.75	NG	80
	Methylene Chloride	23.58	106.0	2575	5.01	NG	21
✓44)	Xylene (total)	29.33	106.0	6015	9.21	NG	25

* Compound is ISTD

$$\text{Total Xylene} = \frac{6015}{324275} \times \frac{250}{0.69150} = 6.71 \text{ NG}$$



Quant Output File: >V2330::D1

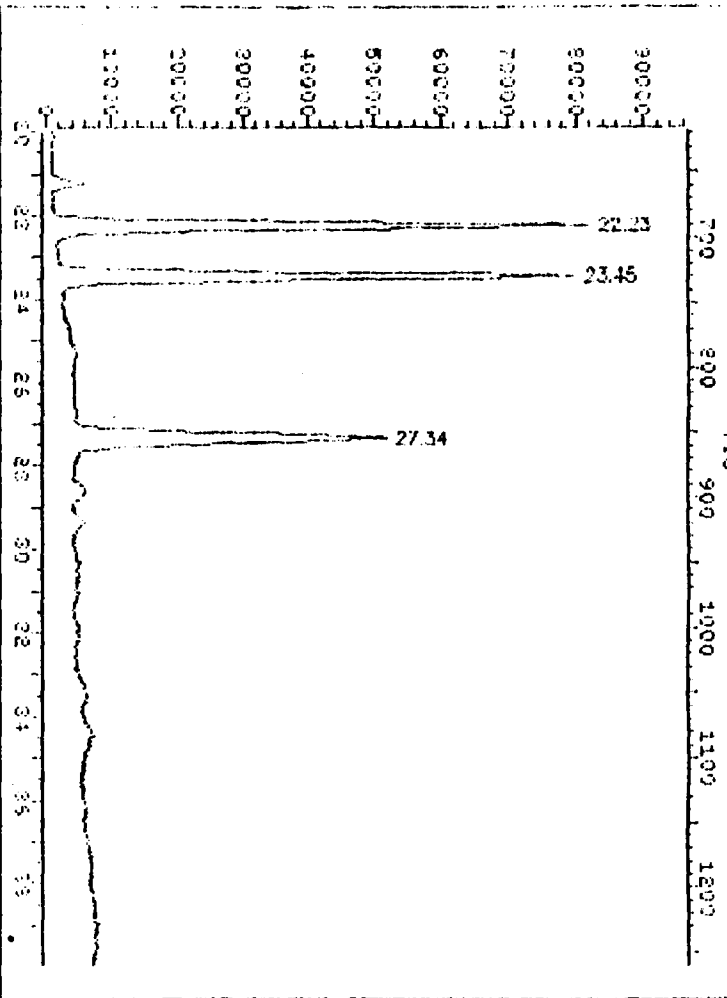
Data File: >V2330::D2
 Name: I3591RE
 Misc: HP5987A OBR:IE(3435.001.100)P1
 ID File: IDUMLE:EA
 Title: CLP 90A ID FILE (PACKED COLUMN)
 Last Calibration: 890419 10:58

Operator ID: KAREN
 Quant Time: 890419 12:39
 Injected at: 890419 11:44

TIC page 1 of 2

TOTAL ION CHROMATOGRAM

File: 202302 35.0-25010 Amu. 1009101
TIC H05087A 03R1E(0435.1



Data File: 202330::D2 Quant Output File: 202330::01

Name: I3551RE

Misc: H05087A 03R1E(5435.001.100)P1

DE File: I00ML:1E0

Title: CLP V09 ID FILE (PACKED COLUMN)

Last Calibration: 890419 10:53

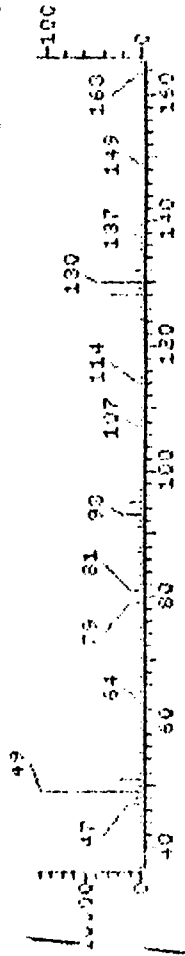
Operator ID: KAREN

Quant Time: 890419 12:59

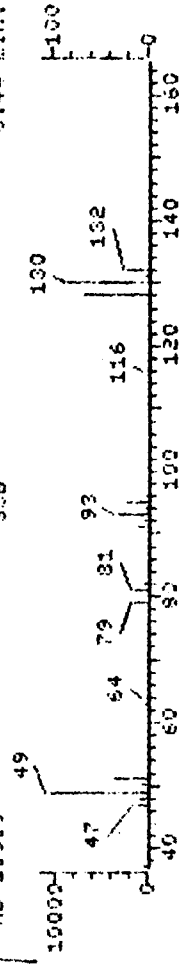
Injected at: 890419 11:44

TIC page 2 of 2

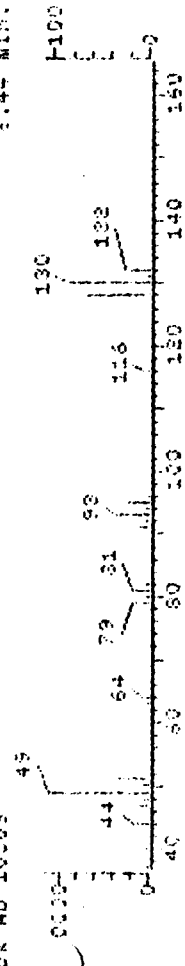
SEE STANDARD SPECTRUM
HF5937A Bromochloromethane SUB Scan 241
Ab 10500 8.54 min.



FILE SPECTRUM (BACKGROUND SUBTRACTED)
HF5937A 08RIE(3435.001.10) Scan 242
Ab 10500 8.44 min.



FILE SPECTRUM (UNFILTERED)
HF5937A 08RIE(3435.001.10) Scan 246
Ab 10500 8.44 min.

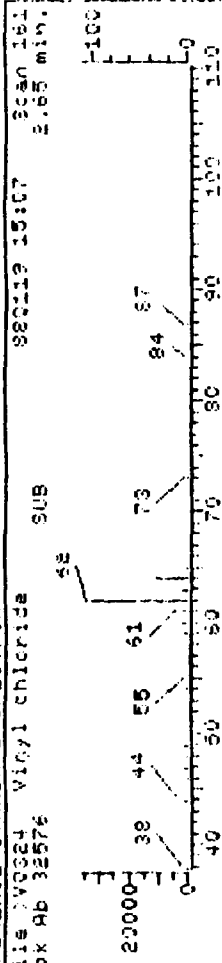


Data File: >U2350:02 Quant Output File: >U2350:01
Name: 12591RE
Misc: HF5937A 08RIE(3435.001.100)P1 Quant ID File: 10VML:EX
Quant Time: 870419 12:37 Last Calibration: 870419 10:58
Injected at: 870419 11:44

Compound No: 1 (1575)
Compound Name: Bromochloromethane
Scan Number: 246
Retention Time: 8.44 min.
Quant Ion: 129.0
Area: 91028
Concentration: 250.00 NG
c-value: 99

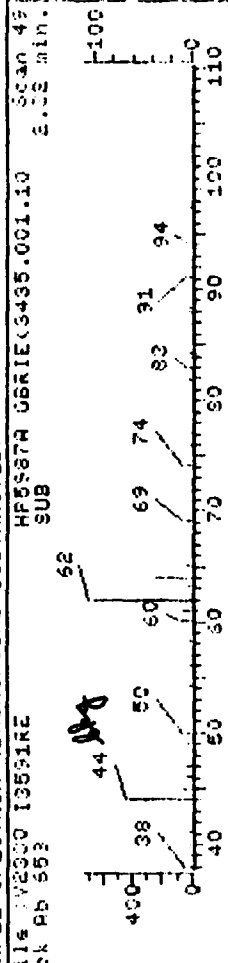
REFERENCE STANDARD SPECTRUM

File: V0324 Vinyl chloride
Spx Ab 32576



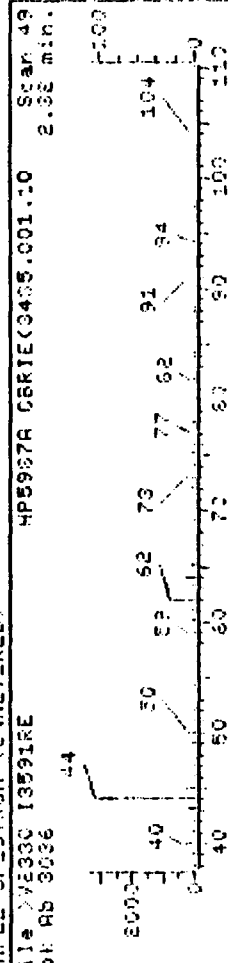
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File: V0330 1359IRE
Spx Ab 553



SAMPLE SPECTRUM (UNALTERED)

File: V0330 1359IRE
Spx Ab 3036



Data File: >U2330:D2

Quant Output File: ^U2330:01

Name: 1359IRE

Misc: HP5897A GRIE(3435.001.100)P1

Quant Time: 390419 12:39

Quant ID File: 100ML:EA

Injected at: 390419 11:44

Last Calibration: 390419 10:55

Compound No: 4

Compound Name: Vinyl Chloride

Scan Number: 49

Retention Time: 2.32 min.

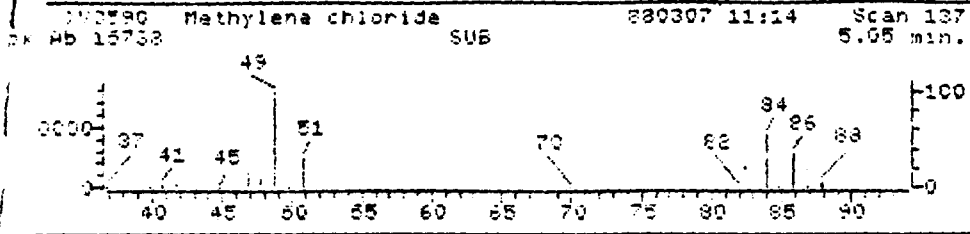
Quant Ion: 62.0

Area: 5900

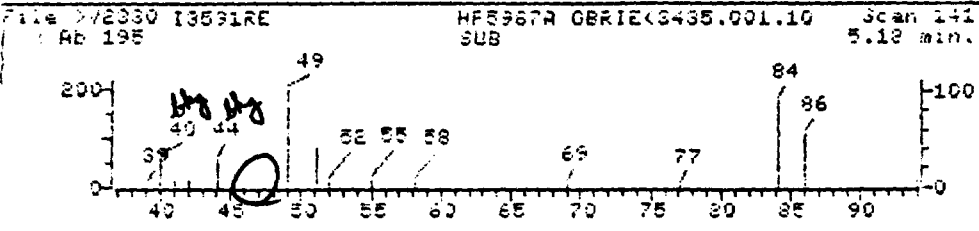
Concentration: 11.59 NG

q-value: 93

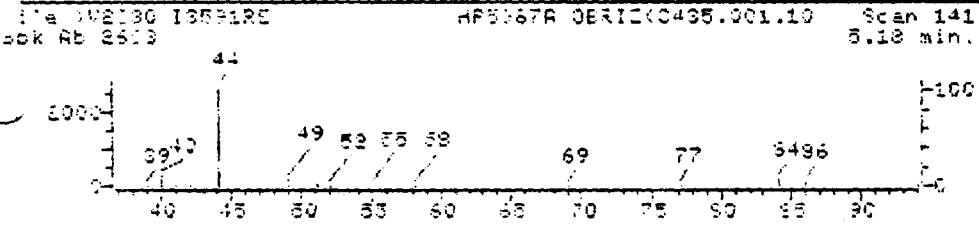
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: DU2530:02

Quant Output File: DU2530:01

Name: I3591RE

Misc: HPS967A GBRIE(3435.001.100)P1

Quant Time: 890419 12:39

Quant ID File: I3UML:5E

Injected at: 890419 11:44

Last Calibration: 890419 10:50

Compound No: 1

Compound Name: Methylene Chloride

Scan Number: 141

Retention Time: 5.18 min.

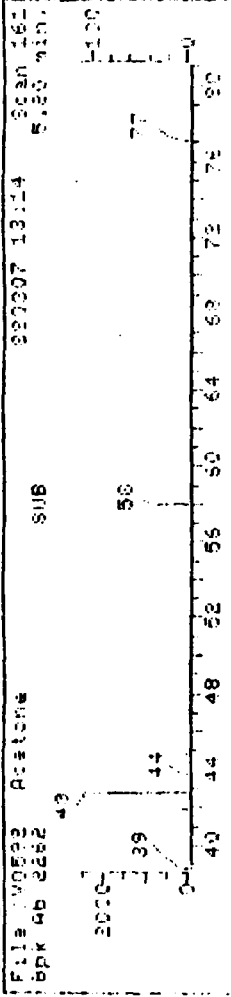
Quant Ion: 84.0

Area: 1613

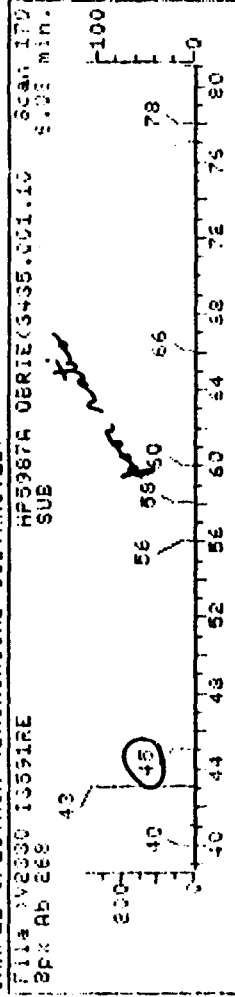
Concentration: 3.07 NG

q-value: 73

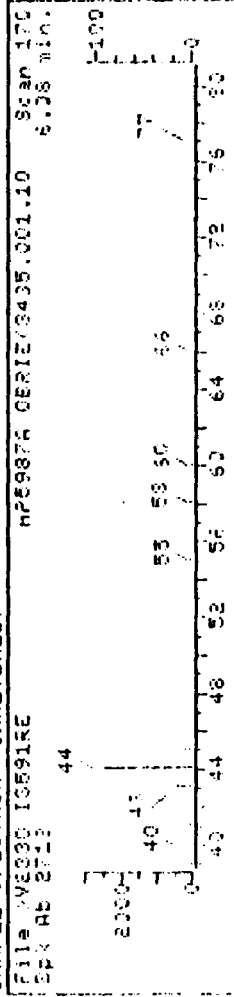
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



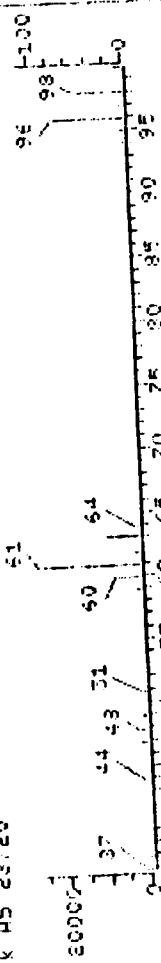
SAMPLE SPECTRUM (UNALTERED)



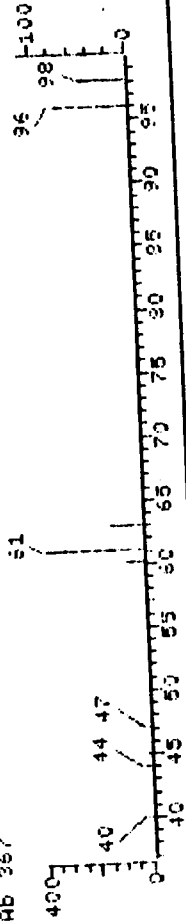
Data File: 002330:02 Quant Output File: 002330:01
 Name: 13591RE
 File: HP5987A OBR1E(3435.001.10)P1 Quant ID File: 10UML:07
 Sample Time: 020019 12:37 Last Calibration: 020419 10:53
 Collected at: 020419 11:44

Compound No: 7
 Compound Name: Acetone
 Scan Number: 170
 Retention Time: 6.08 min.
 Sample Ion: 43.0
 Area: 4692M
 Concentration: 30.64 NG
 Quality: 83

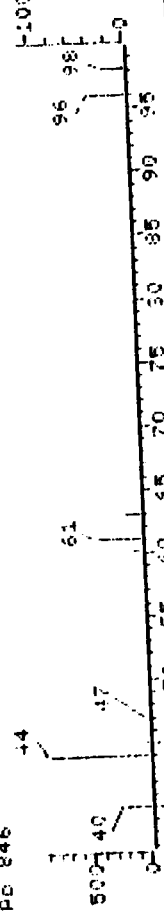
REFERENCE STANDARD SPECTRUM
File >V0912 cis/trans-1,2-Dichloroethene S90307 12:17 Scan 299
9.77 min.
90K AB 28760 SUB



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)
File >V2330 I3591RE HP5987A 08RIE(3435.001.10 Scan 298
EPK AB 357 SUB 10.05 min.



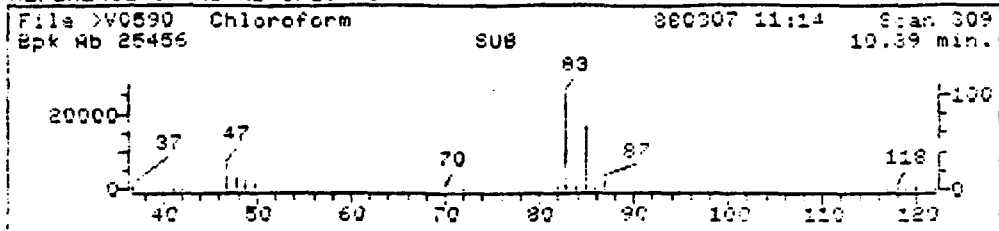
SAMPLE SPECTRUM (UNALTERED)
File >V2330 I3591RE HP5987A 08RIE(3435.001.10 Scan 298
Eck Pg 846 SUB 10.05 min.



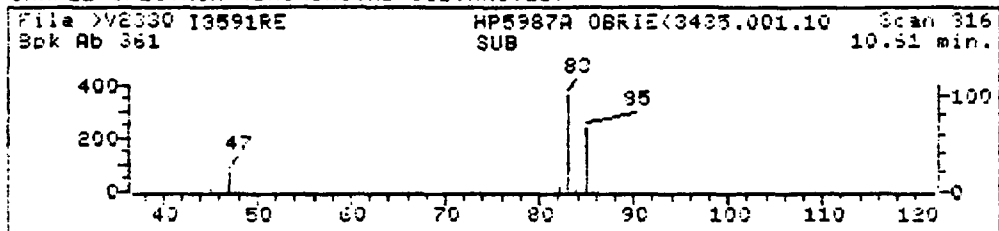
Data File: >V2330:DZ Quant Output File: ^V2330:D1
Name: I3591RE
Misc: HP5987A 08RIE(3435.001.100)P1 Quant ID File: I00ML:EX
Quant Time: 890419 12:39 Last Calibration: 890419 10:58
Injected at: 890419 11:44

Compound No: 12
Compound Name: 1,2-Dichloroethene (total)
Scan Number: 298
Retention Time: 10.05 min.
Quant Ion: 96.0
Area: 2971
Concentration: 5.99 NG
q-value: 83

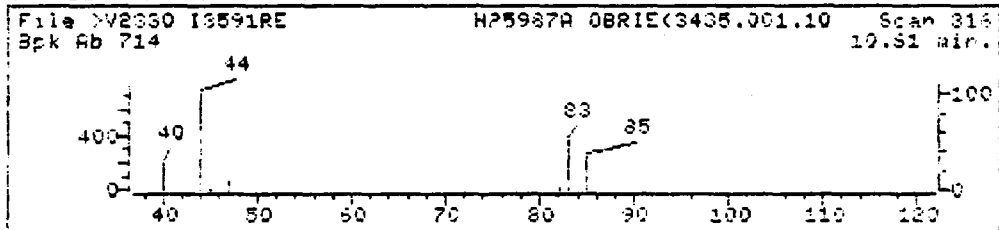
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



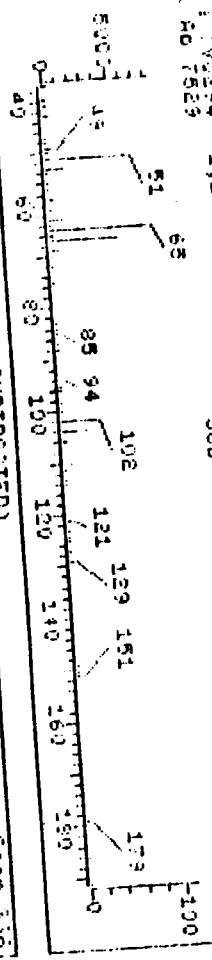
SAMPLE SPECTRUM (UNALTERED)



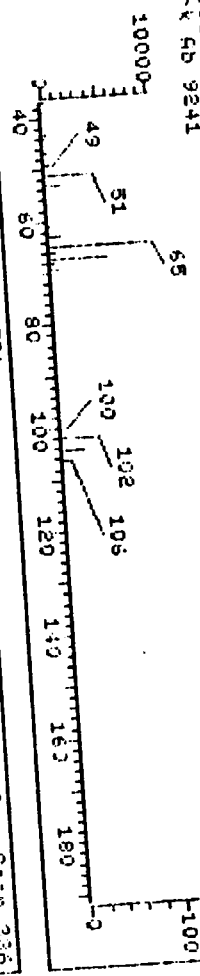
Data File: >V2330::D2 Quant Output File: ^V2330::D1
 Name: I3591RE
 Misc: HP5987A OBRIE(3435.001.100)P1
 Quant Time: 890419 12:39 Quant ID File: IDUML::EX
 Injected at: 890419 11:44 Last Calibration: 890419 10:50

Compound No: 13
 Compound Name: Chloroform
 Scan Number: 316
 Retention Time: 10.51 min.
 Quant Ion: 83.0
 Area: 3912
 Concentration: 4.43 NG
 q-value: 96

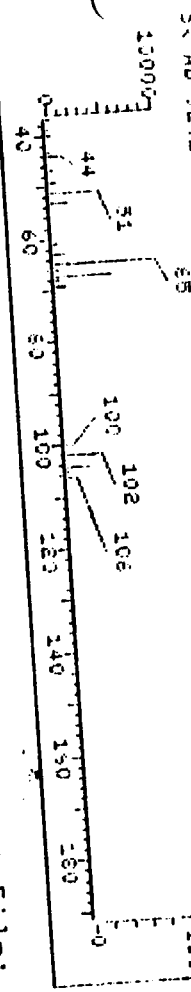
PENCE STANDARD SPECTRUM
 11/03/84 1,2-Dichloroethane d-4 (GUR) 88108 09:53 Scan 715
 HD 7823 11.39 min.



FILE SPECTRUM (BACKGROUND SUBTRACTED)
 FILE 020330 ISS91RE HAN587A SERIE(3435.001.10) SCAN 236
 HD 9241 SUB 11.24 min.



FILE SPECTRUM (UNFILTERED)
 FILE 020330 ISS91RE HAN587A SERIE(3435.001.10) SCAN 236
 HD 9241 SUB 11.24 min.

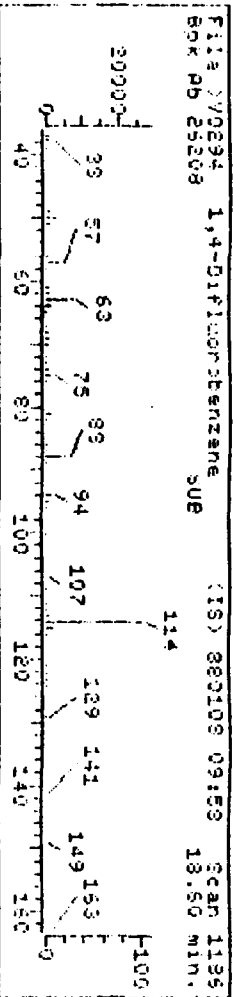


Quant Output File: 020330:01

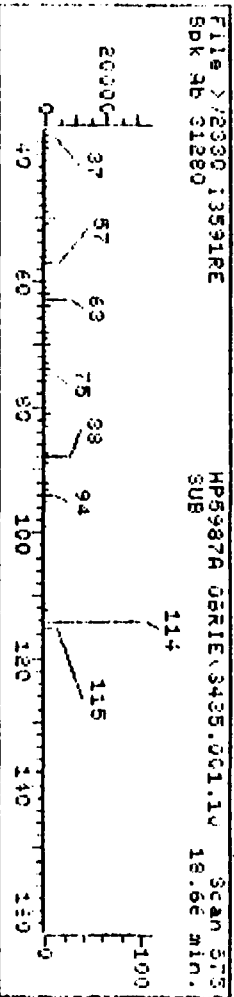
Data File: 020330:02
 Name: ISS91RE
 Misc: HAN587A SERIE(3435.001.100)F1 Quant ID File: ISS91:EX
 Quant Time: 890419 12:39 Last Calibration: 890419 10:58
 Injected at: 890419 11:44

Compound No: 15
 Compound Name: 1,2-Dichloroethane-d4
 Scan Number: 236
 Retention Time: 11.24 min.
 Quant Ion: 65.0
 Area: 106235
 Concentration: 221.95 NG
 q-value: 26

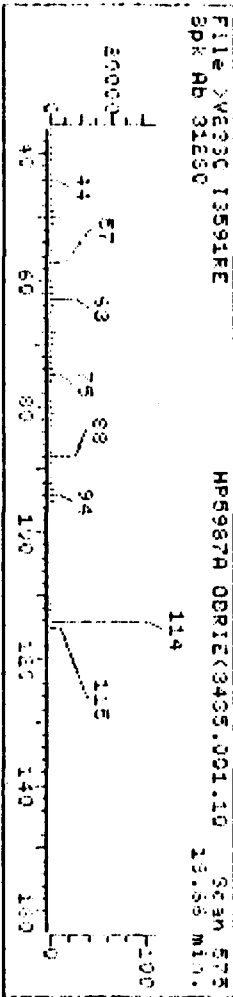
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNSELECTED)



Data File: 702350::D2

Quant Output File: 702350::D1

Name: 13591RE

Misc: HP5987A QBRIE(3435.001.100)P1

Quant Time: 890419 12:39

Injected at: 890419 11:44

Compound No: 18 (1STD)

Compound Name: 1,4-Difluorobenzene

Scan Number: 575

Retention Time: 18.66 min.

Event ID: 114 0

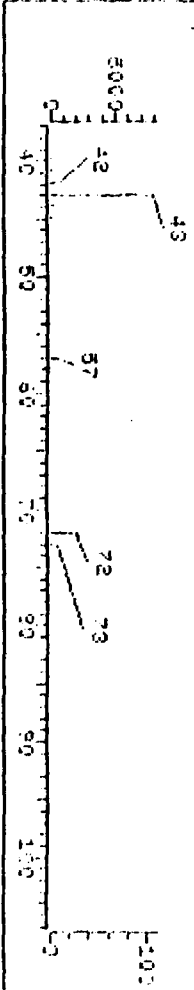
Area: 3715281

Concentration: 250.00 NG

q-values: 100

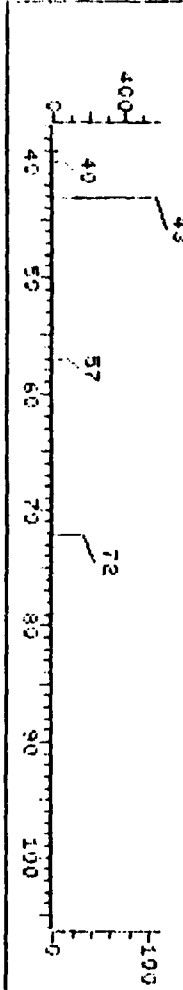
REFERENCE STANDARD SPECTRUM

File: VV0592 2-Butanone (REF) SUB 850507 13:14 Scan 353
Ppk Ab 7462 11.14 min.



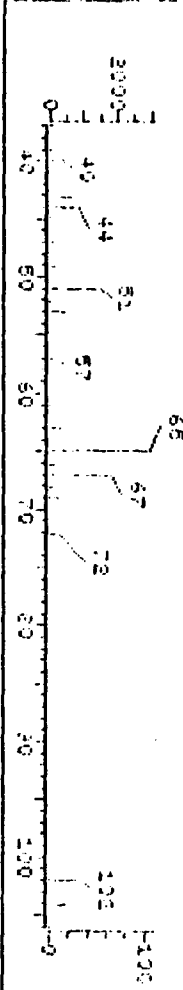
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File: VV2330 1059IRE HFS987A SERIE(3435.001.10 Scan 340
Spx Ab 503 SUE 11.36 min.



SAMPLE SPECTRUM (UNFILTERED)

File: VV2330 1059IRE HFS987A SERIE(3435.001.10 Scan 340
Spx Ab 2826 11.36 min.



Date File: VV2330:02 Quant Output File: VV2330:01

Name: 1059IRE

Misc: HFS987A OBRIE(3435.001.100)P1

Quant Time: 890419 12:39 Quant ID File: 100ML:EX

Injected at: 890419 11:44 Last Calibration: 890419 10:59

Compound No: 1?

Compound Name: 2-Butanone

Scan Number: 340

Retention Time: 11.36 min.

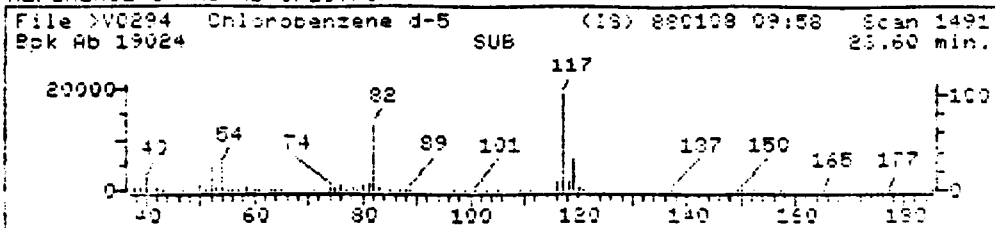
Quant Ion: 72.0

Area: 1212

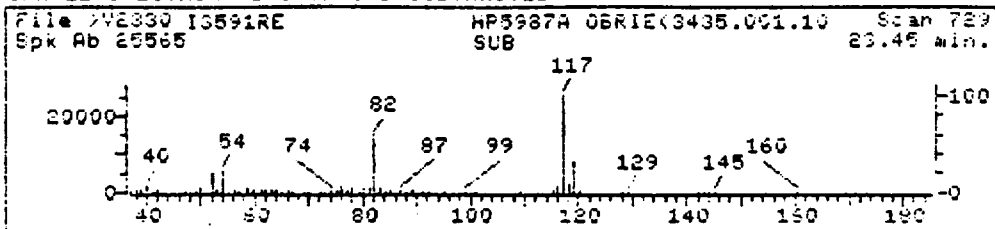
Concentration: 20.04 NG

Q-value: 93

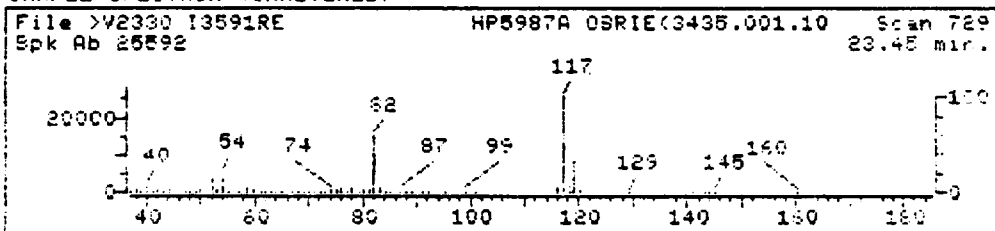
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >V2330:*02

Quant Output File: ^V2330:*01

Name: 13591RE

Misc: HP5987A GBRIE(3435.001.100)F1

Quant Time: 890419 12:39

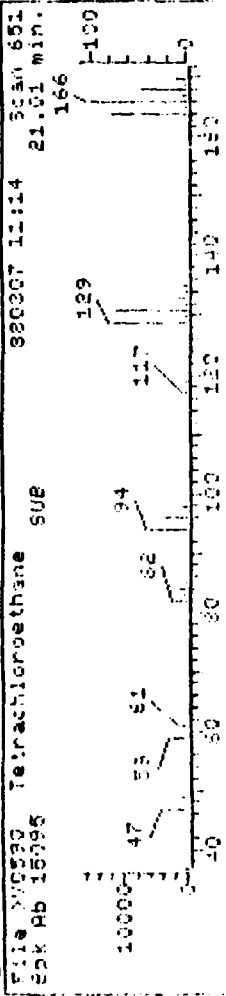
Quant ID File: 10UNL:*0X

Injected at: 890419 11:44

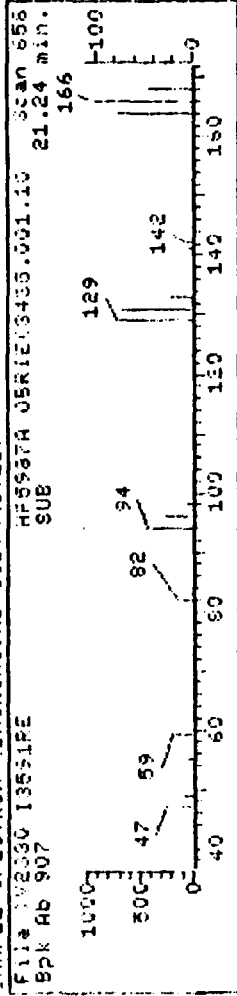
Last Calibration: 890419 10:56

Compound No: 32 (ISTD)
 Compound Name: Chlorobenzene-d5
 Scan Number: 729
 Retention Time: 23.45 min.
 Quant Ion: 117.0
 Area: 524275M
 Concentration: 250.00 NG
 q-value: 93

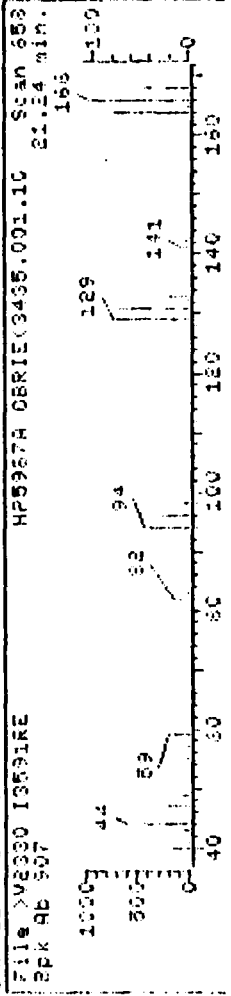
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



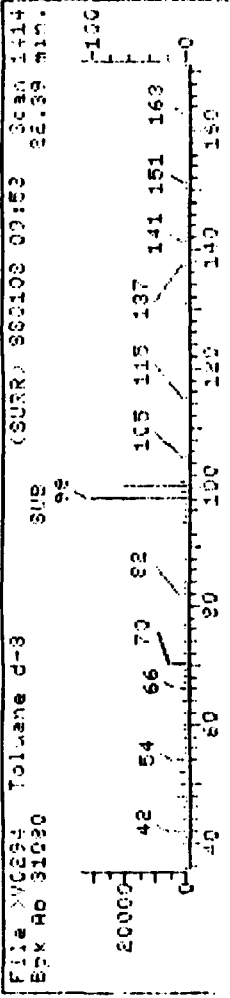
SAMPLE SPECTRUM (UNALTERED)



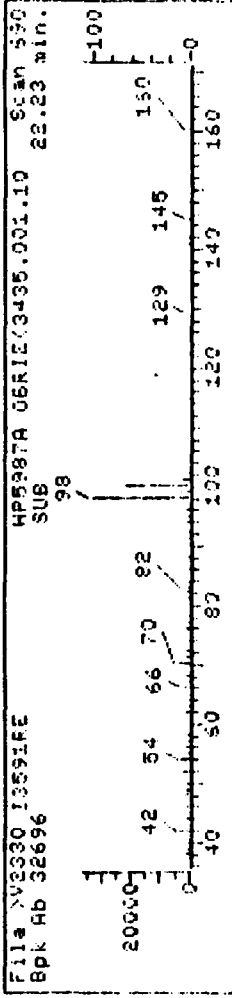
Data File: >VU2330:02 Quant Output File: ^VU2330:01
 Name: 135519E
 MS: HP5987A 05R1E(3435.001.100)P1 Quant ID File: IDVNL:REN
 Quant Time: 890419 12:39 Last Calibration: 870419 10:59
 Injected at: 870419 11:44

Compound No: 35
 Compound Name: Tetrachloroethene
 Scan Number: 656
 Retention Time: 21.24 min.
 Quant Ion: 164.0
 Area: 7686
 Concentration: 18.01 NG
 F-value: 97

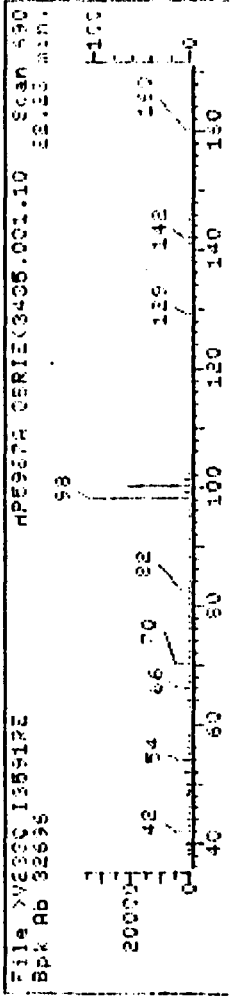
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNFILTERED)

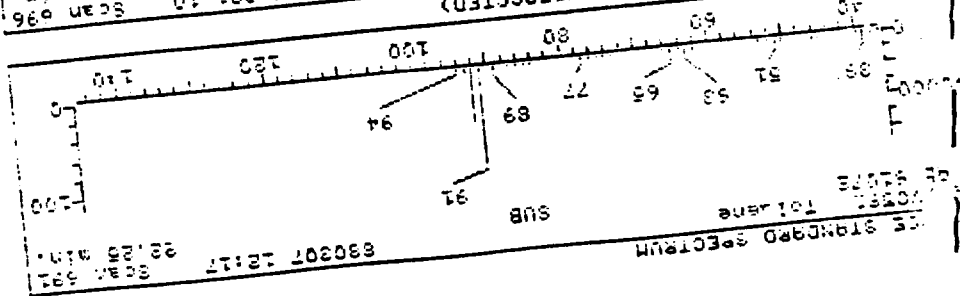
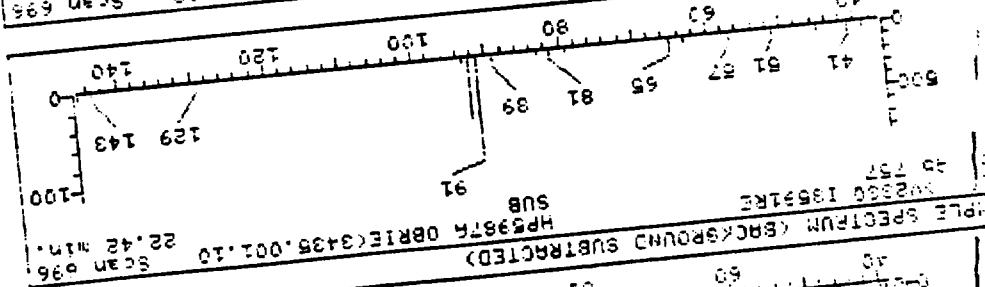
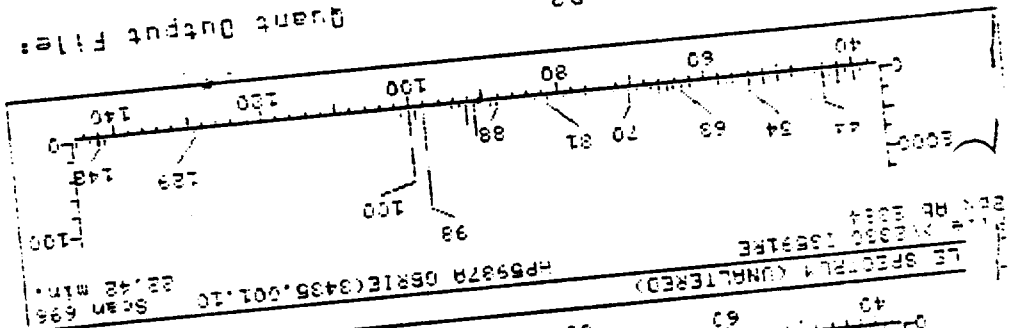


Data File: >V2330::D2 Quant Output File: ^V2330::D1
 Name: 13591RE
 Niso: HP5987A 06RIE(3435.001.100)P1
 Quant Time: 090419 12:39 Quant ID File: IDVHL:EX
 Injected at: 090419 11:44 Last Calibration: 090419 10:50

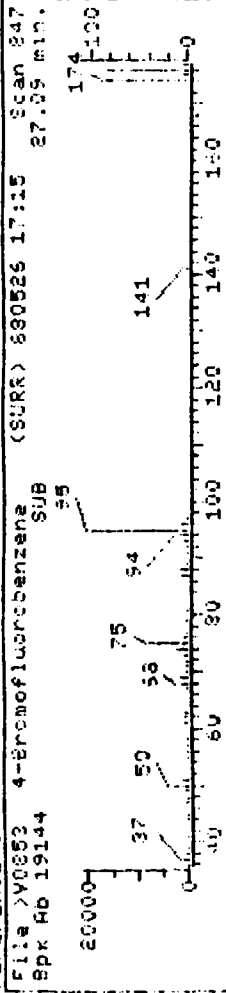
Compound No: 37
 Compound Name: Toluene-d8
 Scan Number: 420
 Retention Time: 22.23 min.
 Quant ion: 98.0
 Area: 597572
 Concentration: 237.20 NG
 q-value: 100

Compound No: 38
 Compound Name: Toluene
 Scan Number: 696
 Retention Time: 22.42 min.
 Quant Ion: 92.0
 Area: 5426
 Concentration:
 Values: 94
 5.22 MS

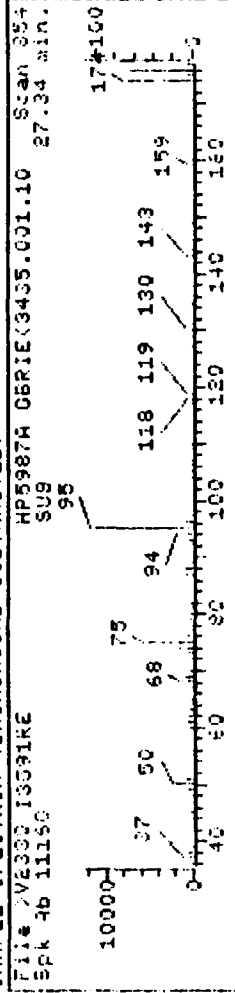
Data File: \U2330:02
 Name: 15513E
 Misc: HP5987A DBRIE(3435.001.100)21
 Quant Time: 890419 12:59
 Injected at: 890419 11:44
 Quant ID File: IDUNT:EX
 Last Calibration: 890419 10:58
 Quant Output File: \U2330:01



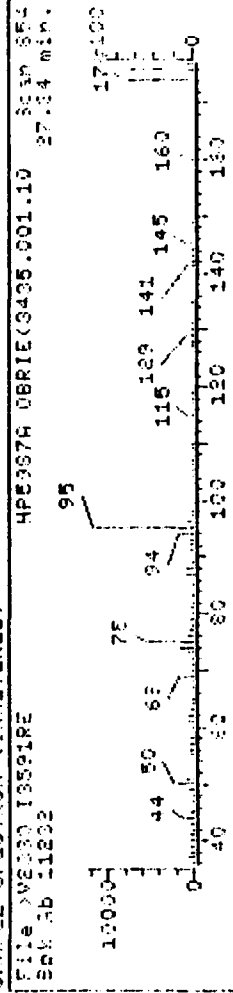
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNFILTERED)



Data File: >V2330:0Z

Quant Output File: ^V2330:01

Name: I3591RE

Misc: HP5987A QBR1E(3435.001.100)P1

Quant Time: 890419 12:39

Quant ID File: 100ML:EX

Injected at: 890419 11:44

Last Calibration: 890419 10:50

Compound No: 41

Compound Name: Bromofluorobenzene

Scan Number: 854

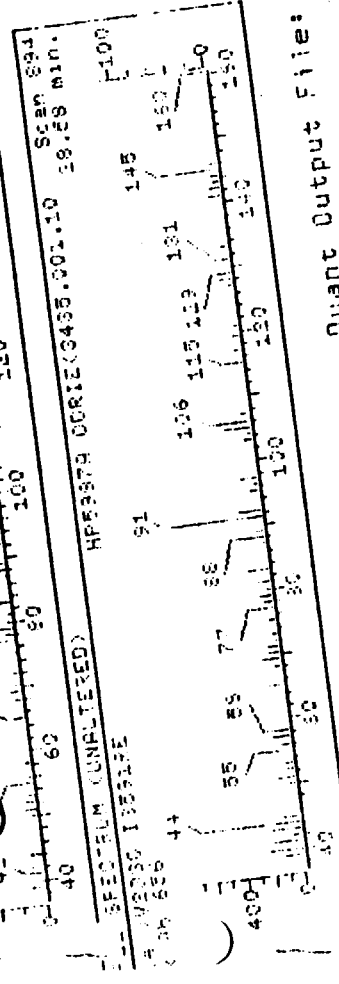
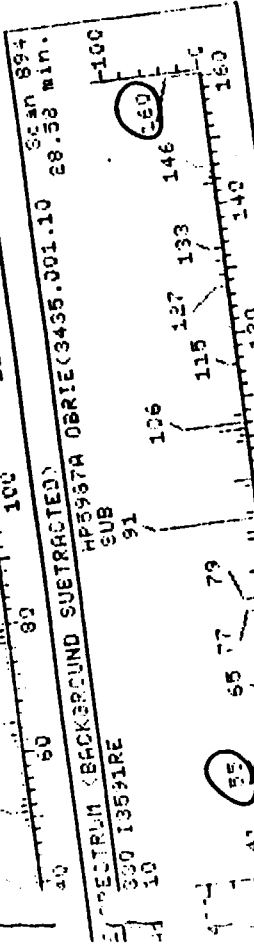
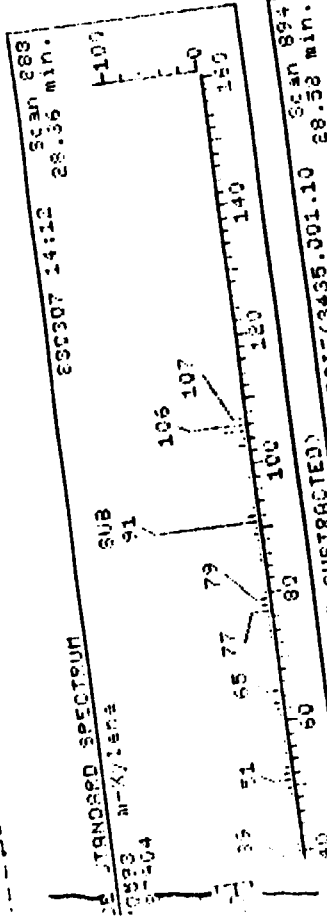
Retention Time: 27.34 min.

Quant Ion: 95.0

Area: 185726

Concentration: 226.75 NG

q-value: 90



Data File: >V2330:ID2

Name: 13521RE
 Misc: HP5987A DBRIE(3435.001.100)F1
 Quant Time: 890419 12:39
 Injected at: 890419 11:44

Compound No: 43
 Compound Name: m-Xylene
 Compound Number: 874
 Scan Number: 22.58 min.
 Retention Time: 105.0
 Quant Ion: 453
 Concentration: 5.06 NG
 C-values: E2

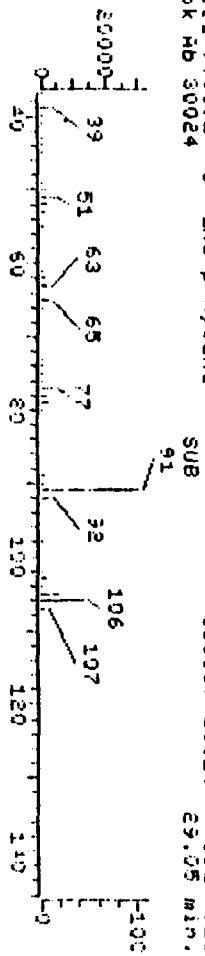
Quant Output File: >V2330:ID1
 Quant ID File: 190ML:EX
 Last Calibration: 890419 10:58

X

REFERENCE STANDARD SPECTRUM

File: >V0592 o- and p-Xylenes
Spk No: 30024

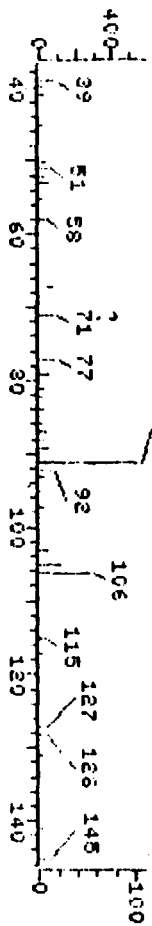
280307 13:14 Scan 910
29:05 min.



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File: >V2330 I3591RE
Spk No: 533

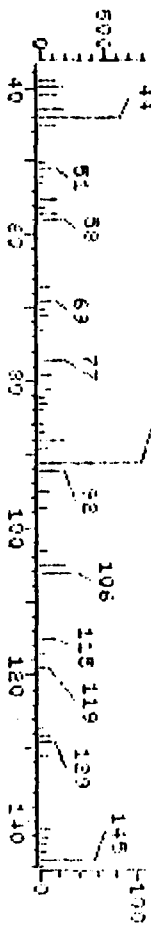
HP5987A OBR1E(3435.001.10 Scan 918
SUB 29:32 min.



SAMPLE SPECTRUM (UNFILTERED)

File: >V2330 I3591RE
Spk No: 752

HP5987A OBR1E(3435.001.10 Scan 918
SUB 29:33 min.



Data File: >U2330::D2

Quant Output File: >U2330::D1

Name: I3591RE
Miss: HP5987A OBR1E(3435.001.100)F1
Quant Time: 890419 12:39
Injected at: 890419 11:44
Quant ID File: IQUML:EX
Last Calibration: 890419 10:58

Compound No: 44
Compound Name: Xylene (total)
Scan Number: 918
Retention Time: 29.33 min.
Quant Ion: 105.0
Area: 6015
Concentration: 0.21 ug
q-value: 93

QUANT REPORT

Operator ID: KAREN Quant Rev: 6 Quant Time: 890419 15:41
 Input File: >U2333::01 Injected at: 890419 14:50
 Data File: >U2333::02 Dilution Factor: 1.00000
 Name: I3592
 IAC: HF5867A SBRIE(3435.001.100)P1

ID File: IDUMM::EX
 Title: CLP VQA ID FILE (PACKED COLUMN)
 Last Calibration: 890419 10:58

Compound	R.T.	Q	ion	Area	Conc	Units	g
1) *Bromochloromethane	8.47	128.0		79887	250.00	NG	97
2) Methylene Chloride	5.18	94.0		1177	3.23	NG	88
7) Acetone	6.11	43.0		4269	29.29	NG	90
8) 1,2-Dichloroethane-d4	11.27	65.0		100777	213.46	NG	83
19) *1,4-Difluorobenzene	18.66	114.0		367040M	250.00	NG	100
9) 2-Butanone	11.39	72.0		1575	36.56	NG	80
7) Benzene	16.11	78.0		4415	3.03	NG	100
21) *Chlorobenzene-d5	23.45	117.0		329996M	250.00	NG	97
32) Toluene-d8	22.24	98.0		388293	226.62	NG	100
2) Toluene	22.42	82.0		5178	3.01	NG	88
1) Bromofluorobenzene	27.34	95.0		180427M	216.49	NG	88
4) m-Xylene	26.42	100.0		3857M	2.31	NG	81
4) p-Xylene (total)	26.37	100.0		3255M	4.36	NG	82

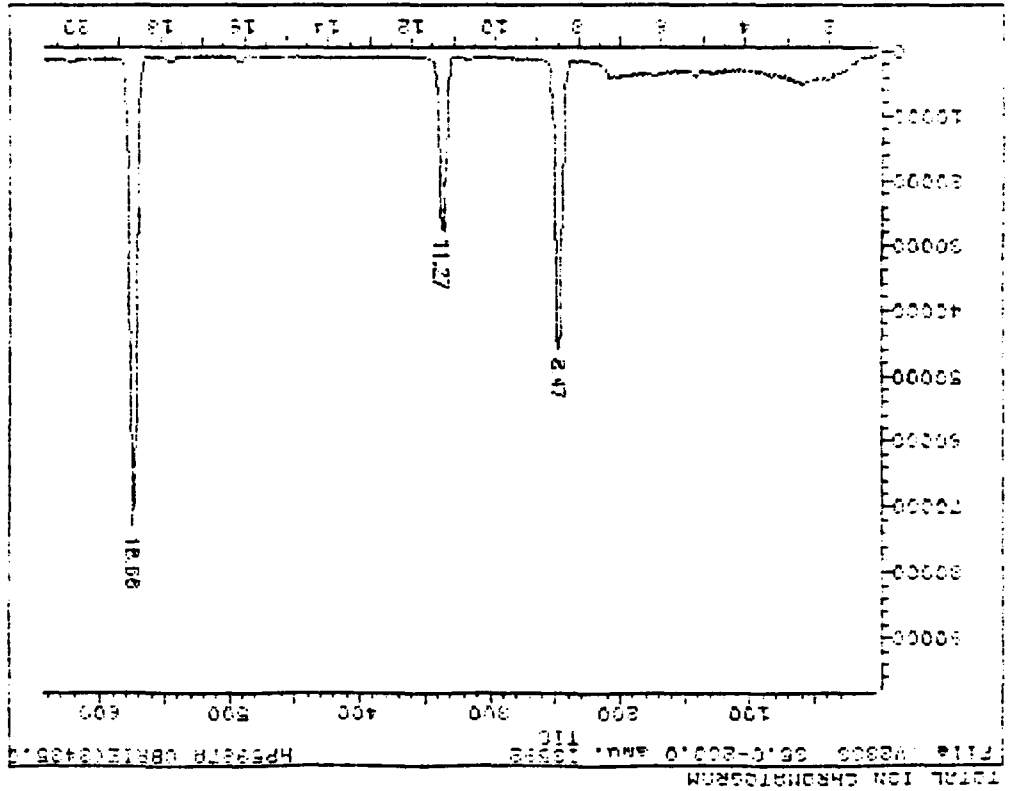
* Compound is ISTD

TIC Page 1 of 2

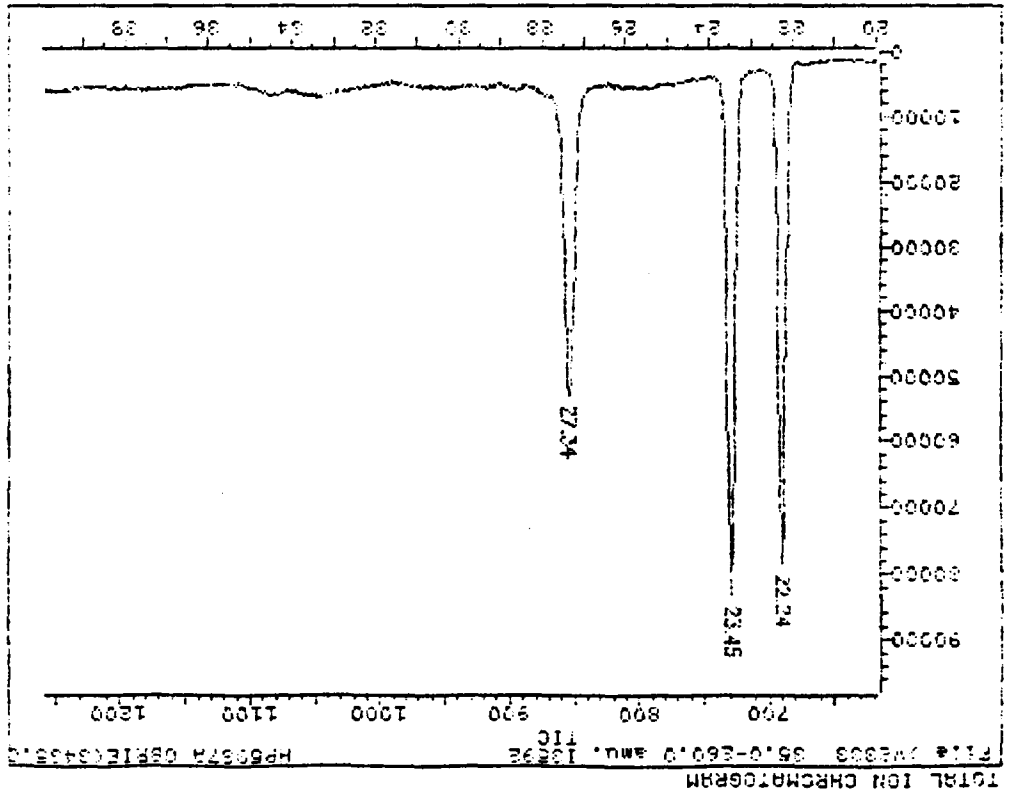
Operator ID: KAREN
Injunct Time: 890419 15:41
Injuncted at: 890419 14:50

Last Calibration: 890419 10:52
Method: HP5787A DBRIE(3435.001,100)F1
Injunct CUP U08 IO FILE (PICKED COLUMN)
Injunct Filter: IONML:EX

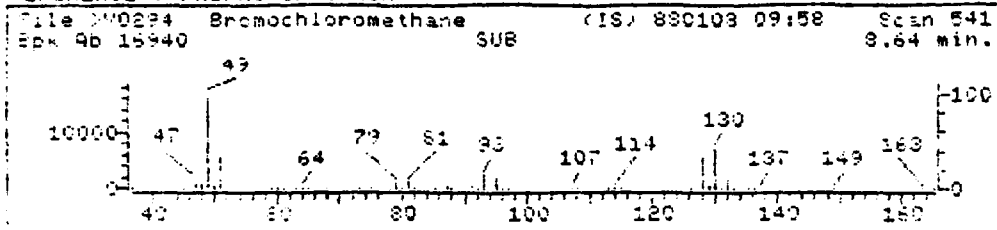
Name: 1582
Data File: \02335:02
Quant Output File: \02335:01



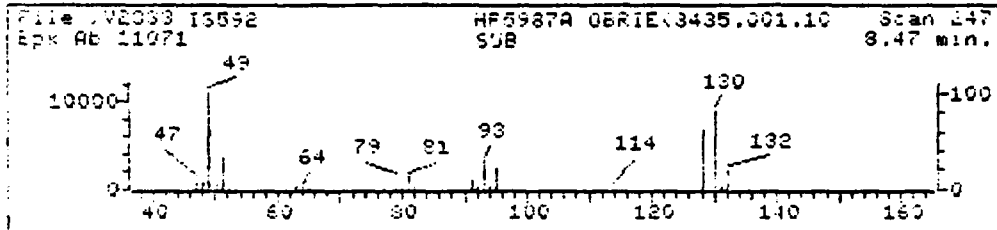
Data File: >U2333:02
 Name: 13592
 Misc: HP5987A DBRIE(3435,001,100)PI
 ID File: IDUML:EX
 Title: CLP U08 ID FILE (PACKED COLUMN)
 Last Calibration: 890419 10:58
 Operator ID: KAREN
 Run Time: 890419 15:41
 Injected at: 890419 14:50
 TIC page 2 of 2



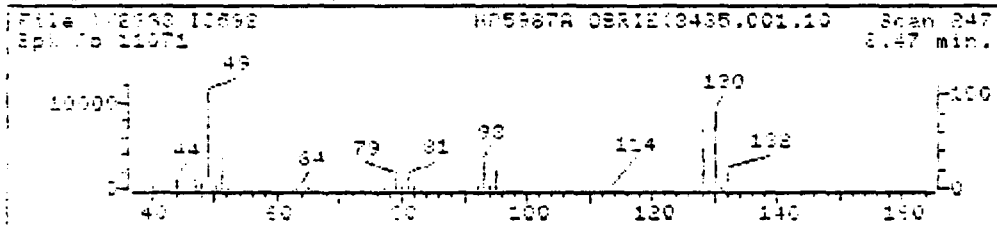
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >U0233:02 Quant Output File: >U0233:01
 Name: 15592
 Mass: HP5987A QBR1E(3435.001.10)P1
 Quant Time: 890419 15:41 Quant ID File: IDUML:EX
 Injected at: 890419 14:50 Last Calibration: 890419 10:58

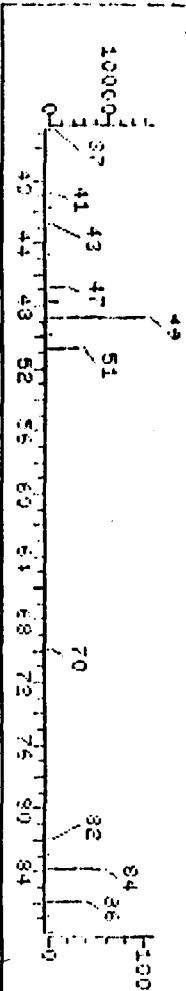
Compound No: 1 (ISTD)
 Compound Name: Bromochloromethane
 Scan Number: 247
 Retention Time: 8.47 min.
 Quant Ion: 128.0
 Area: 79887
 Concentration: 250.00 NG
 Quality: 97

REFERENCE STANDARD SPECTRUM

File #100530 Methylene chloride SUB

820307 11:14

Scan 137
5.05 min.

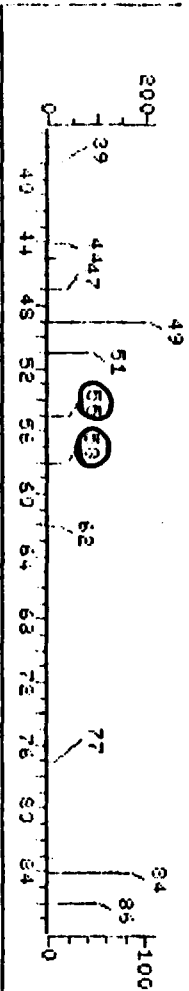


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File #02333 13592

HP5967A QSR1E(3435.001.10 SUB

Scan 141
5.19 min.

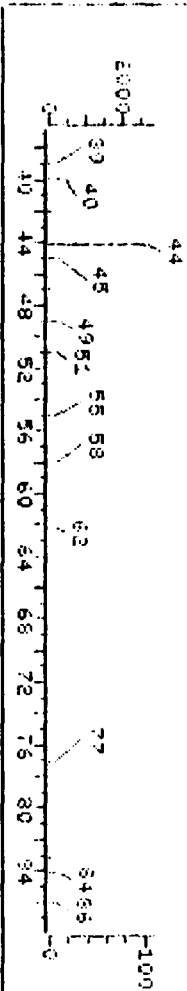


SAMPLE SPECTRUM (UNFILTERED)

File #02333 13592

HP5967A QSR1E(3435.001.10

Scan 141
5.19 min.



Data File: >02333:02

Quant Output File: >02333:01

Name: 13592

Mass: HP5967A QSR1E(3435.001.10)P1

Quant Time: 890419 15:41

Quant ID File: 100ML:EX

Injected at: 890419 14:50

Last Calibration: 890419 10:59

Compound No: 6

Compound Name: Methylene Chloride

Scan Number: 141

Retention Time: 5.19 min.

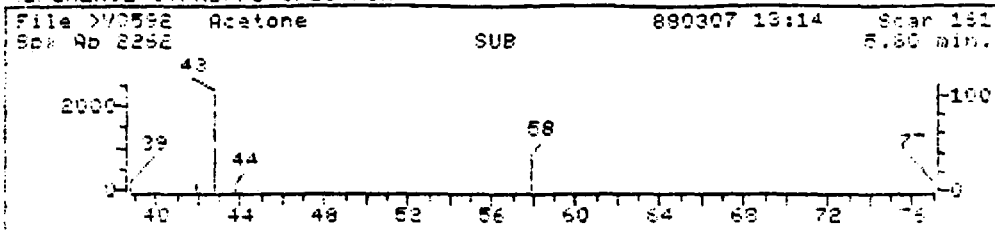
Quant Ion: 84.0

Area: 1673

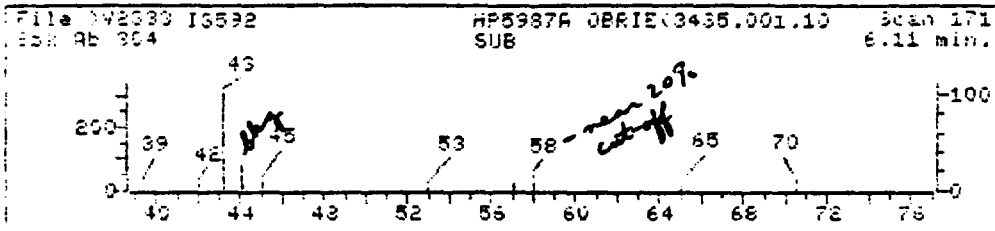
Concentration: 3.23 PJ

Quality: 80

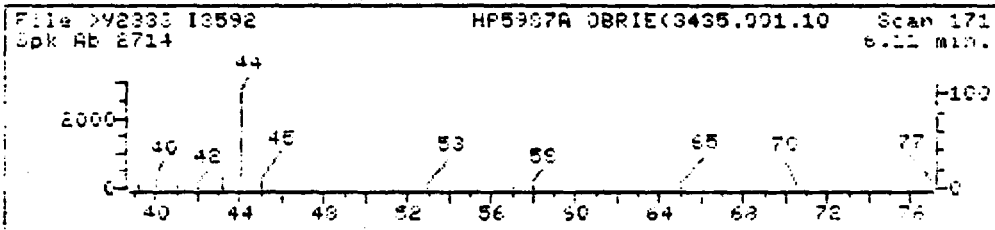
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



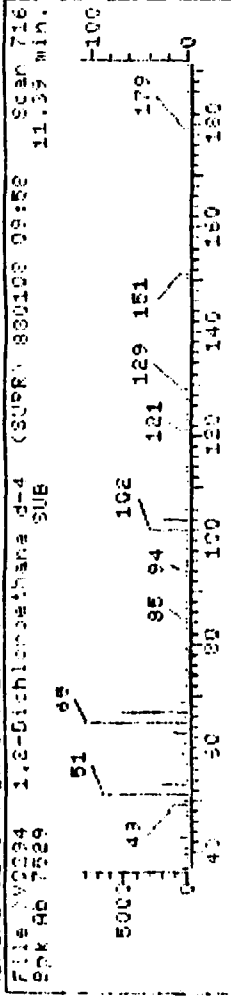
SAMPLE SPECTRUM (UNALTERED)



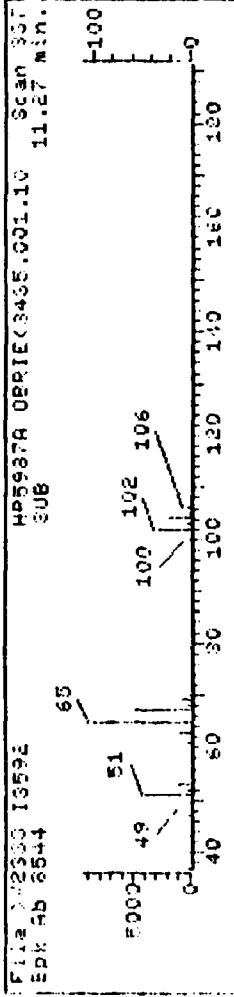
Data File: >V2333::D2 Quant Output File: >V2333::D1
 Name: I3592
 Misc: HP5987A OBRIE(3435.001.100)P1
 Quant Time: 990419 15:41 Quant ID File: I0VML::E
 Injected at: 890419 14:50 Last Calibration: 890419 13:58

Compound No: 7
 Compound Name: Acetone
 Scan Number: 171
 Retention Time: 6.11 min.
 Quant Ion: 43.0
 Area: 4267
 Concentration: 28.28 NG
 q-value: 90

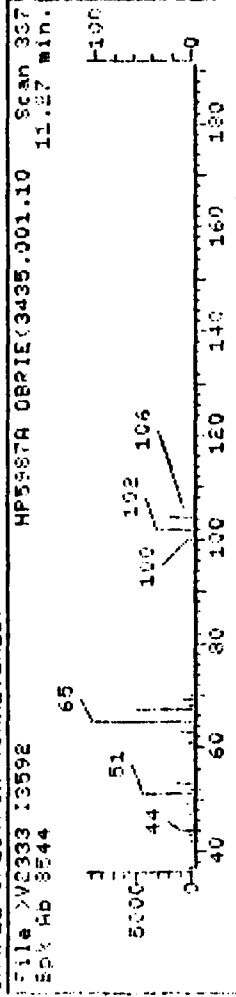
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >V2353::D2

Quant Output File: ^V2353::D1

Name: 13592

Misc: HP5987A OBRIE(3435.001.100)P1

Quant Time: 890419 15:41

Quant ID File: IDVML:23

Injected at: 890419 14:50

Last Calibration: 890419 10:33

Compound No: 15

Compound Name: 1,2-Dichloroethane-d4

Scan Number: 337

Retention Time: 11.27 min.

Quant Ion: 65.0

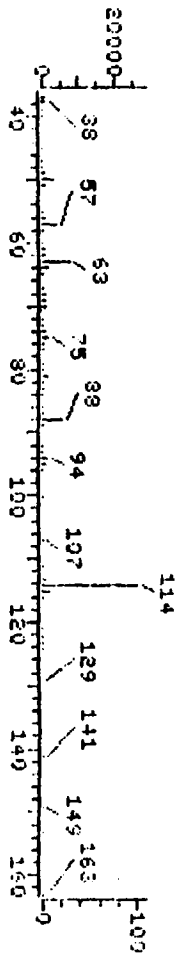
Area: 100777

Concentration: 213.46 NG

g-value: 66

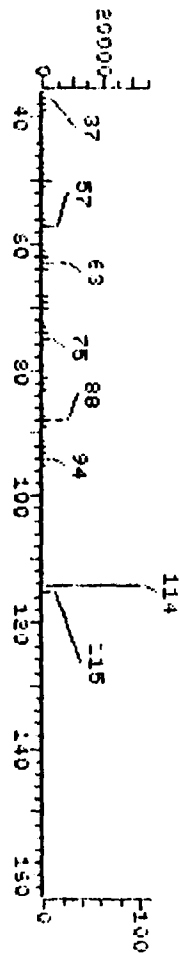
REFERENCE STANDARD SPECTRUM

File: >V02694 1,4-Difluorobenzene SUB (13) 880106 09:58 Scan 1139
EPK NB 26208 19.50 min.



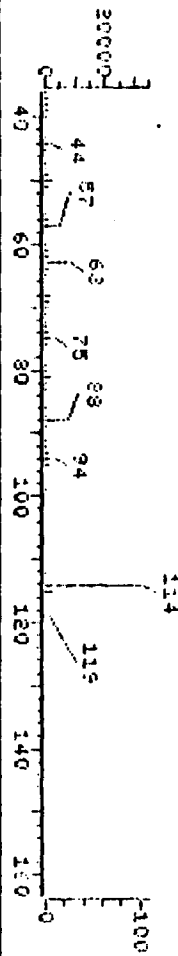
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File: >V02533 13592 HPS967A OBR1E(3435.001.10 Scan 575
EPK NB 31770 SUB 19.66 min.



SAMPLE SPECTRUM (UNALTERED)

File: >V02533 13592 HPS967A OBR1E(3435.001.10 Scan 575
EPK NB 31800 19.55 min.



Data File: >V02533:::02

Quant Output File: >V02533:::01

Name: 13592

Misc: HPS967A OBR1E(3435.001.100)P1

Quant Time: 890419 15:41

Quant ID File: 10UM1::EN

Injected at: 890419 14:50

Last Calibration: 890419 10:58

Compound No: 18 (ISTD)

Compound Name: 1,4-Difluorobenzene

Scan Number: 575

Retention Time: 18.66 min.

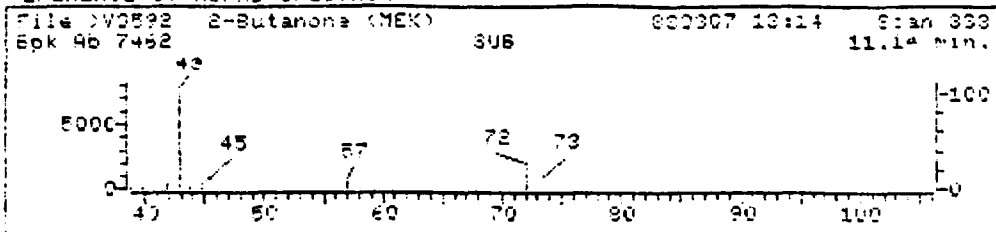
Quant Ion: 114.0

Area: 357040M

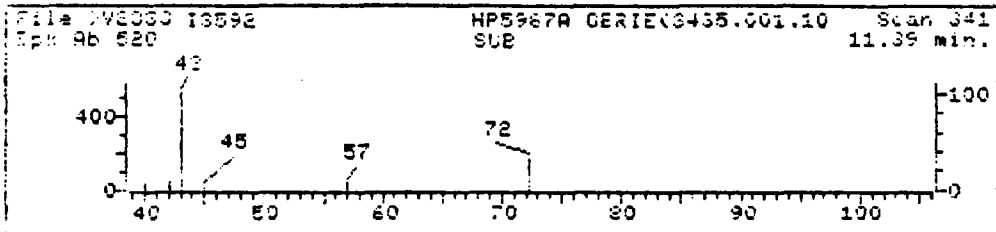
Concentration: 250.00 NG

q-values: 100

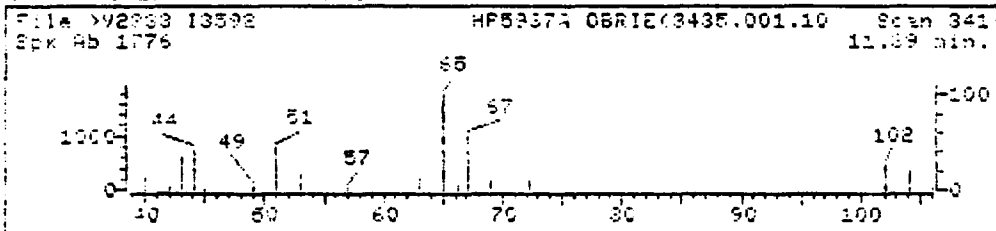
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



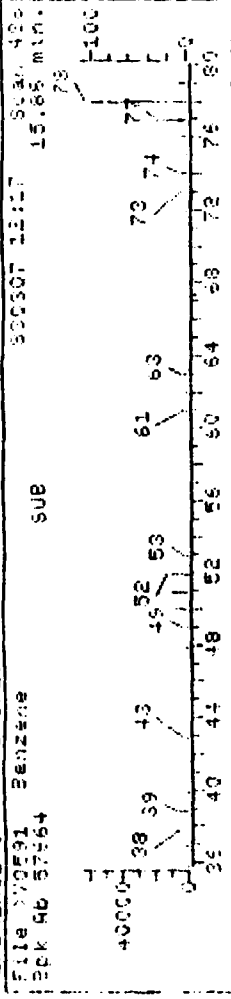
SAMPLE SPECTRUM (UNALTERED)



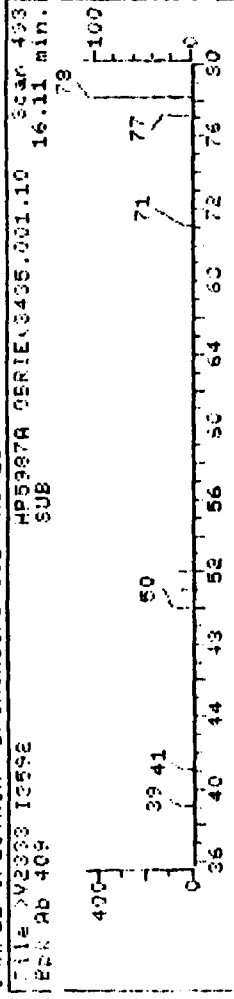
Data File: >V2333::02 Quant Output File: ^V2333::01
 Name: 13592
 Misc: HP5987A GRIE(3435.001.100)P1
 Quant Time: 890419 15:41 Quant ID File: IDUM1::EX
 Injected at: 890419 14:50 Last Calibration: 890419 10:58

Compound No: 19
 Compound Name: 2-Butanone
 Scan Number: 341
 Retention Time: 11.39 min.
 Quant Ion: 72.0
 Area: 1575
 Concentration: 26.36 NG
 Precision: 80

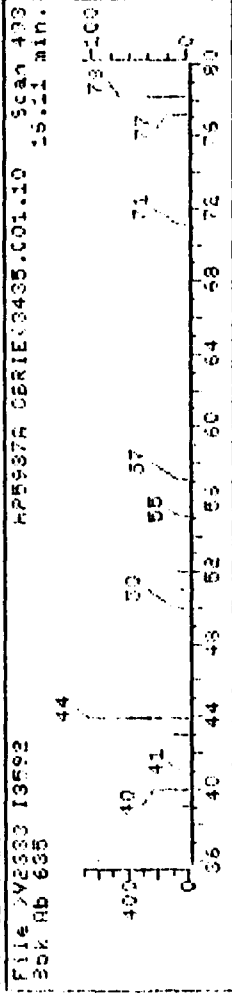
REFERENCE SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Date File: >U2333:02

Name: I3592

Misc: HP5987A G6RIE\3435.001.100\F1

Quant Time: 890419 15:41

Injected at: 890419 14:50

Quant Output File: >U2333:01

Quant ID File: I0101L:5A

Last Calibration: 890419 10:58

Compound No: 27

Compound Name: Benzene

Scan Number: 493

Retention Time: 15.11 min.

Quant Ion: 73.0

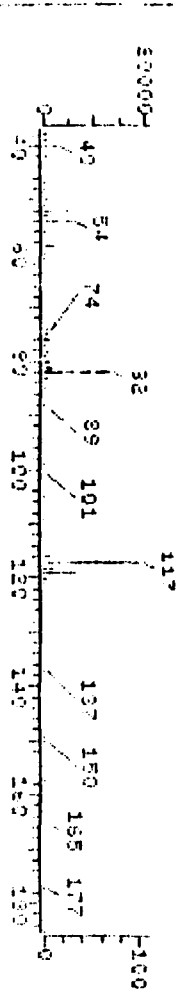
Area: 4415

Concentration: 3.03 NG

q-value: 100

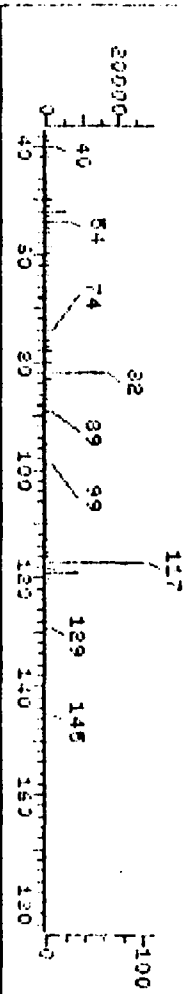
REFERENCE STANDARD SPECTRUM

File: W0234 Chlorobenzene d-5 SUB (13) 08:13 07:53 23:30 1:491
Scan No 19024



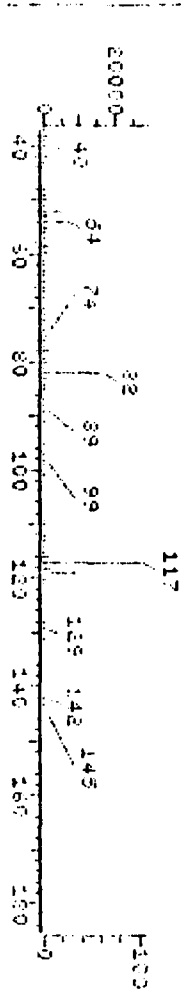
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File: W0233 13192 HP53679 DBP1E(3435.001.10) Scan 739
Scan No 26685 SUB 23:45 min.



SAMPLE SPECTRUM (UNFILTERED)

File: W0233 13692 HP53679 DBP1E(3435.001.10) Scan 739
Scan No 26723 SUB 23:45 min.

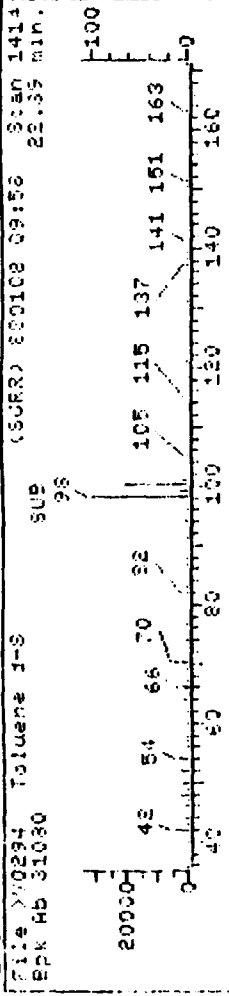


Base File: W023333:02 Quant Output File: W23333:01

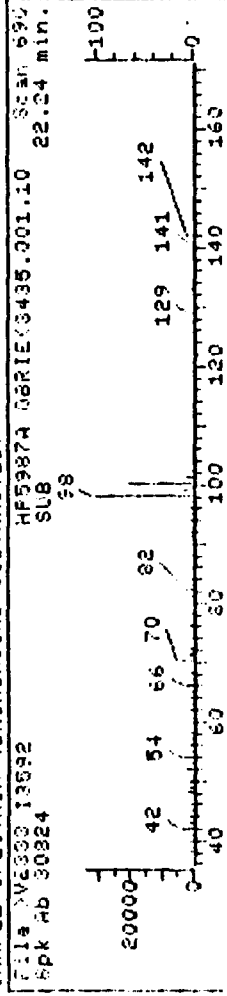
Name: 10552
Mass: HP53679 DBP1E(3435.001.100)P1 Quant ID File: 160M11:54
Quant Time: 890419 15:41 Last Calibration: 890-19 10:56
Injected at: 890419 14:50

Compound No: 32 (ISTD)
Compound Name: Chlorobenzene-d5
Scan Number: 739
Retention Time: 23.45 min.
Quant Ion: 117.0
Area: 3299364
Concentration: 250.00 ng
g-001 ug: 97

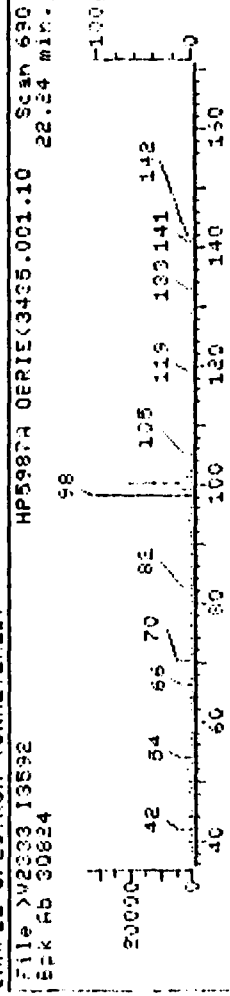
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >V2333:102

Quant Output File: >V2333:01

Name: I3592

Misc: HP5987A 06RIE(3435.001.100)P1

Quant Time: 890419 15:41

Quant ID File: IDV.ML:008

Injected at: 890419 14:50

Last Calibration: 290419 10:58

Compound No: 37

Compound Name: Toluene-d8

Scan Number: 690

Retention Time: 22.24 min.

Quant Ion: 93.0

Area: 383295

Concentration: 225.62 NG

q-value: 100

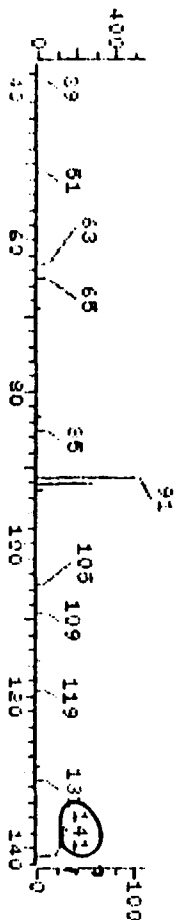
REFERENCE STANDARD SPECTRUM

File: W02331 Toluene SUB 380007 12:17 Scan: 691
SOL: 40 S1072 22.25 min.



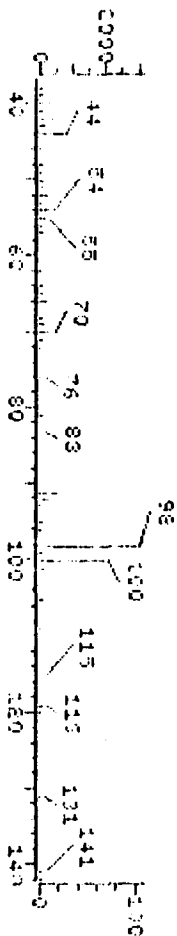
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File: W02333 18592 HPS987A DBRIE(3435.001.10) Scan: 696
SOL: 494 SUB 22.42 min.



SAMPLE SPECTRUM (UNFILTERED)

File: W02333 18592 HPS987A DBRIE(3435.001.10) Scan: 694
SOL: 494 SUB 22.42 min.

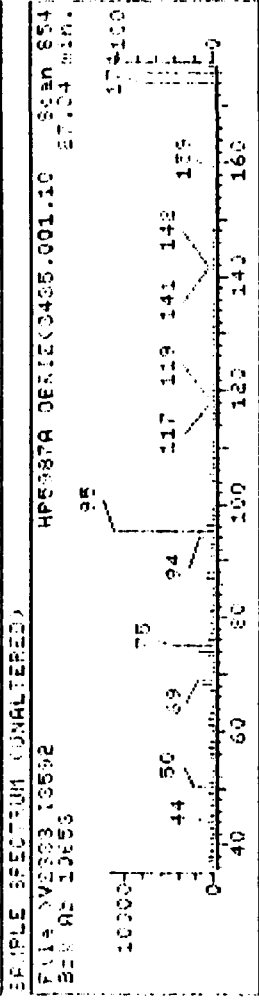
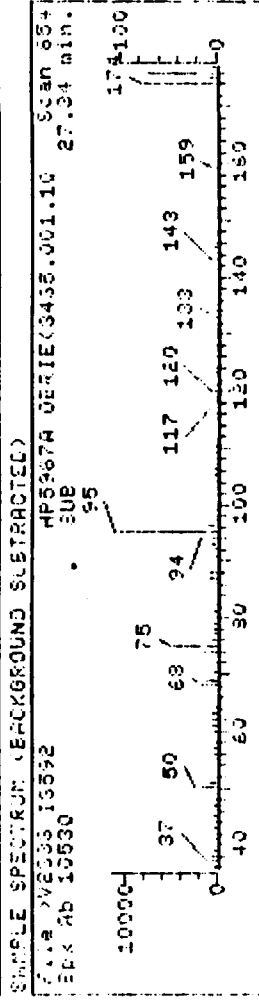
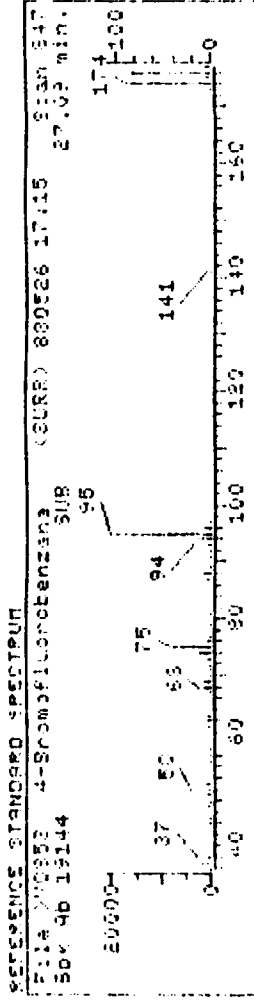


Data File: W02333:02 Quant Output File: W02333:01

Name: REF92
 Mass: HPS987A DBRIE(3435.001.10)P1 Quant ID File: 10VNL:EX
 Quant Time: 850419 15:41 Last Calibration: 870019 10:59
 Injected at: 850419 14:50

Compound No: 33
 Compound Name: Toluene
 Scan Number: 696
 Retention Time: 22.42 min.
 Quant Lot: 0000
 Area: 5178
 Concentration: 5.01 NG
 Signature: ??

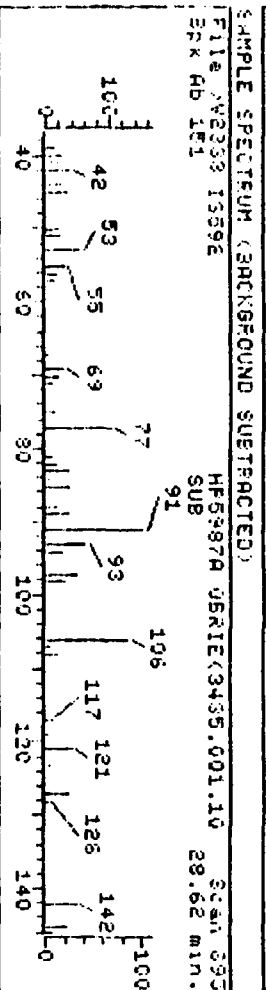
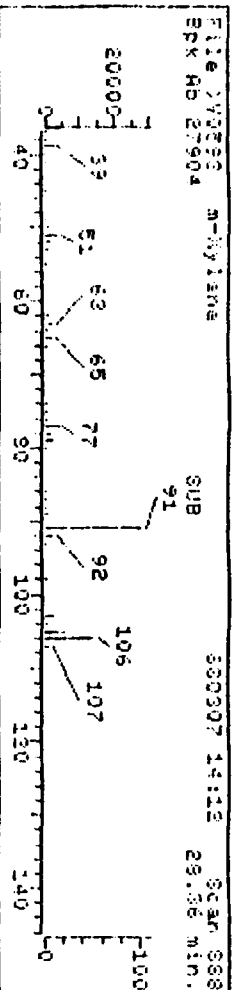
X



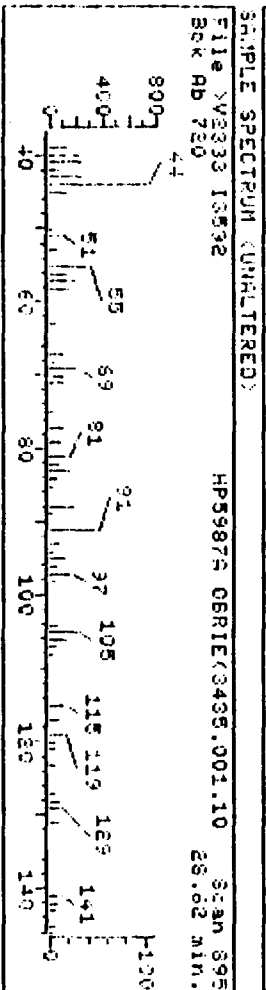
Data File: >V2333:02 Quant Output File: >V2333:01
 Name: 13592
 Misc: HP5987A DBRIE(3435.001.100)P1
 Quant Time: 890419 15:41 Quant ID File: 10041:01
 Injected at: 890419 14:50 Last Calibration: 890419 10:58

Compound No: -1
 Compound Name: Bromofluorobenzene
 Scan Number: 954
 Retention Time: 27.54 min.
 Quant Ion: 99.0
 Area: 150427M
 Concentration: 216.49 ug
 q-value: 93

REFERENCE STANDARD SPECTRUM



X



Data File: V02333:02

Quant Output File: V02333:01

Name: 13592

Misc: HPS987A DBRIE(3435.001.100)P1

Quant Time: 890419 15:41

Quant ID File: IDUMPL:EX

Injected at: 890419 14:50

Last Calibration: 890419 10:58

Compound No: 43

Compound Name: m-Xylene

Scan Number: 895

Retention Time: 28.62 min.

Quant Ion: 106 0

Area: 2653M

Concentration: 2.91 NS

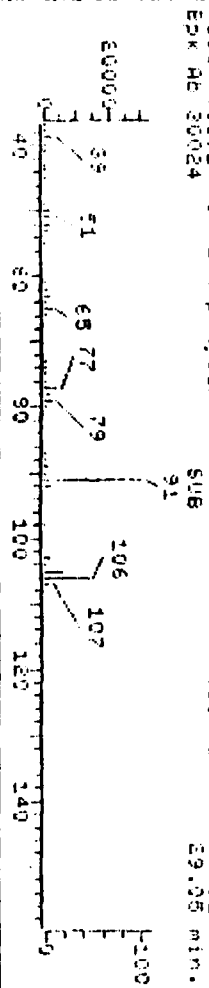
q-value: 41

REFERENCE STANDARD SPECTRUM

File: V02592 0 - Std P-Xylene
Epk Ad 30024

880607 13:14

Scan 319
29.05 min.

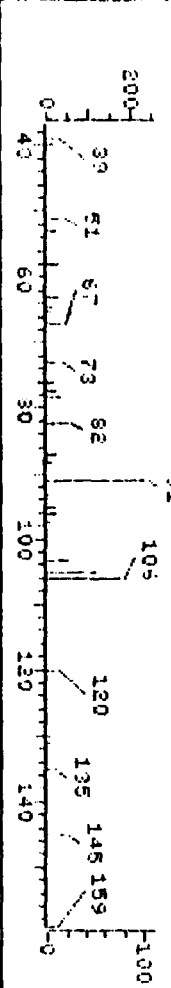


SAMPLE SPECTRUM (EPIGROUND SUBTRACTED)

File: V02592 10592
Epk Ad 231

HP5937A DBFIE(3435.001.10
SUB 29.33 min.

Scan 319
29.33 min.

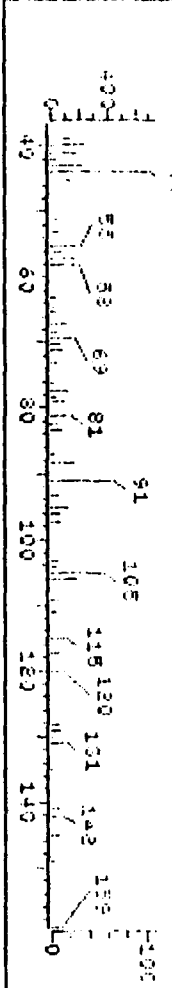


SAMPLE SPECTRUM (UNFILTERED)

File: V02592 10592
Epk Ad 674

HP5937A DBFIE(3435.001.10
Scan 918
29.33 min.

Scan 918
29.33 min.



Data File: V02592.D2

Quant Output File: V02592.D1

Name: 15572

MS#: HP5937A DBFIE(3435.001.100)P1

Quant Time: 390419 15:41

Quant ID File: 100701:EX

Injected at: 390419 14:50

Last Calibration: 890419 10:58

Compound No: 44

Compound Name: Xylene (total)

Scan Number: PID

Retention Time: 29.33 min.

Quant Ion: 106.0

Area: 5265M

Concentration: 4.36 NG

q-value: 52

X

QUANT REPORT

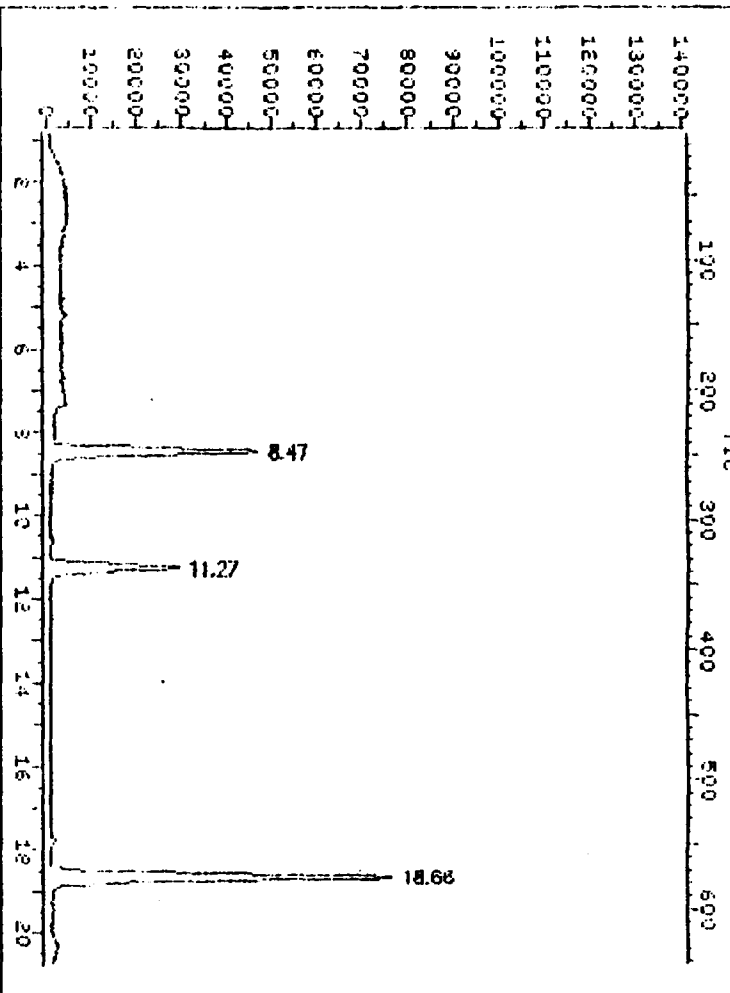
Operator ID: KAREN Quant Rev: 6 Quant Time: 890419 16:01
 Output File: >U2334::01 Injected at: 890419 15:45
 Data File: >U2334::02 Dilution Factor: 1.00000
 Name: 13593
 Disc: HP5987A OBRIE(3435.001.100)P1

ID File: IDUML:EX
 Title: CLP UGA ID FILE (PACKED COLUMN)
 Last Calibration: 890419 10:53

Compound	R.T.	Q ion	Area	Conc	Units	g
1) *Bromochloromethane	9.47	128.0	81591	250.00	NG	99
✓ 5) Methylene Chloride	5.19	84.0	3012	5.69	NG	71
7) Acetone	4.14	43.0	2223M	17.47	NG	75
15) 1,2-Dichloroethane-d4	11.27	65.0	105034	217.83	NG	36
18) *1,4-Difluorobenzene	18.66	114.0	384418M	250.00	NG	100
17) 2-Butanone	11.36	72.0	1374	21.75	NG	33
22) *Chlorobenzene-d5	23.45	117.0	339117M	250.00	NG	78
19) 1-Methyl-2-pyrrolidone	18.57	83.0	5214	3.57	NG	33
37) Toluene-d8	22.23	98.0	379044M	215.39	NG	100
3) Toluene	22.42	92.0	27326	25.13	NG	25
10) Ethylbenzene	25.32	106.0	33233M	51.76	NG	97
41) Bromofluorobenzene	27.34	95.0	213804M	216.15	NG	77
13) Xylene	28.62	105.0	77228M	62.37	NG	34
14) Xylene (total)	29.37	106.0	73609M	96.08	NG	94

* Compound is ISTD

$$\text{Total Xylene} = \frac{(77228 + 73609)}{339117} \times \frac{250}{0.69150} \times \frac{10000/100}{(3.9661)(0.541)} = 7494.54 \text{ ug/kg}$$



Data File: V2334::D2

Quant Output File: V2334::01

Name: 15503

Misc: HP5997A DBP15(3435.001,100)F1

SD File: IDUML:EX

Title: CLP VDA ID FILE (PACKED COLUMN)

Last Calibration: 890419 10:59

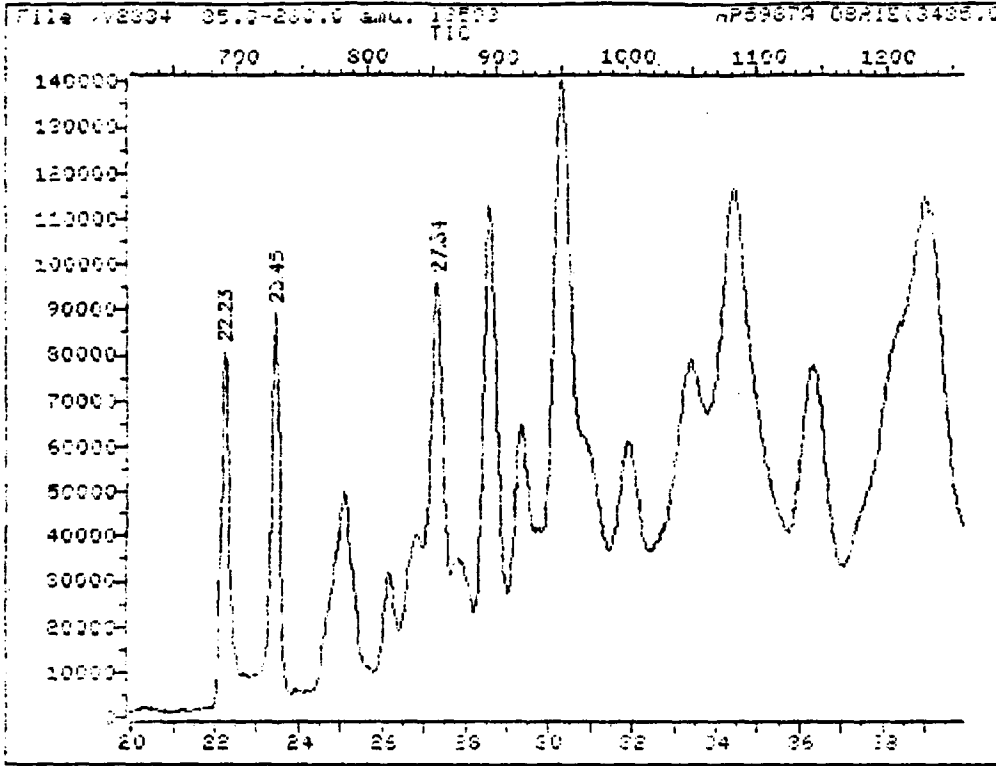
Operator ID: KAREN

Quant Time: 890419 16:51

Injected at: 890419 15:45

TIC page 1 of 2

TOTAL ION CHROMATOGRAM



Data File: >02334::D2

Quant Output File: >02334::D1

Name: 13593

Inst: HP5987A OBRIE(3435.001.100)P1

ID File: IDVPL::EX

Title: CLP VCA ID FILE (PACKED COLUMN)

Last Calibration: 890419 10:52

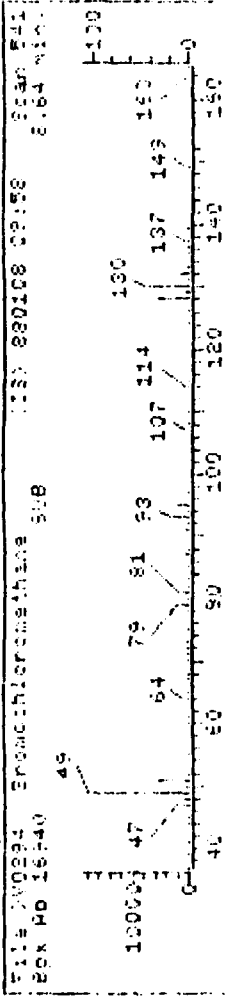
Operator ID: KAREN

Quant Time: 890419 16:51

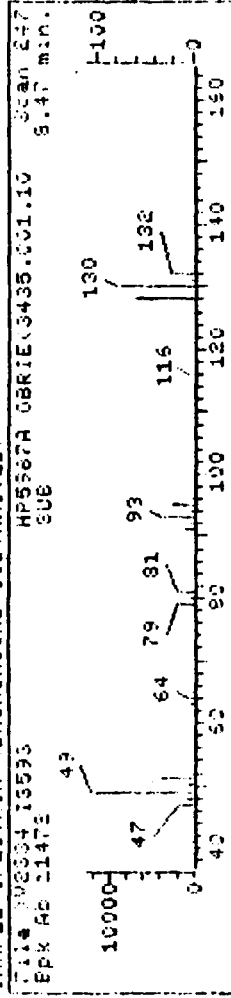
Injected at: 890419 15:45

TIC page 2 of 2

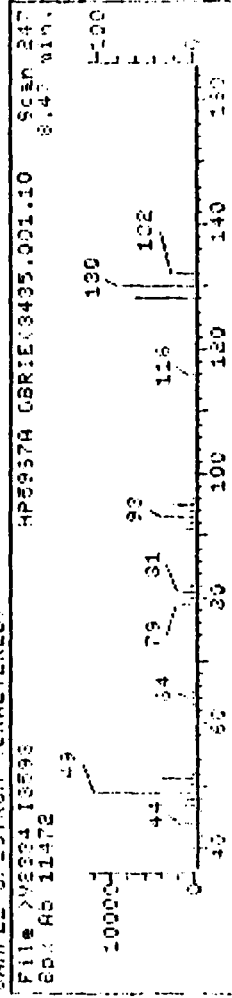
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Date File: >V02534::D2

Name: 13597

Misc: HP5567A GRIE(3435.001.100)P1

Quant Time: 880419 13:51

Injected at: 390419 13:45

Quant Output File: >Q2534::D1

Quant IC File: 100MG::EX

Last Calibration: 880419 10:59

Compound No: 1 (1ST9)

Compound Name: Bromochloromethane

Scan Number: 247

Retention Time: 8.47 min.

Quant Ion: 158.0

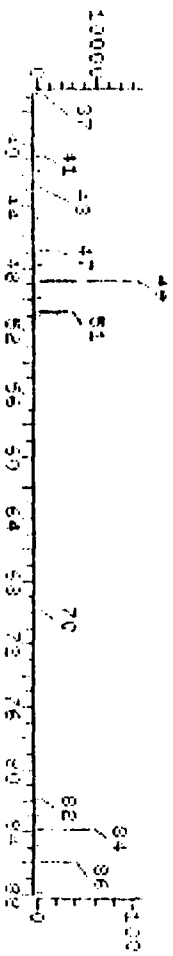
Area: 21591

Concentration: 250.00 NG

r-value: .99

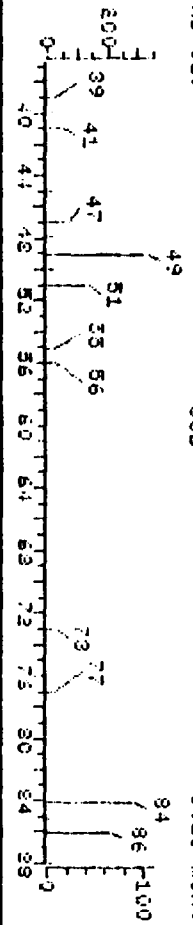
REFERENCE STANDARD SPECTRUM

File: V02534 1-methylene chloride SUB 020307 11:14 Scan 137
Exp. No: 15758



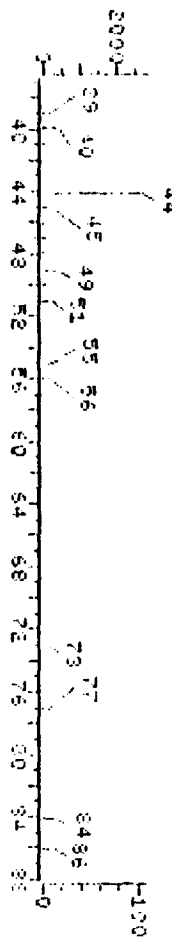
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File: V02534 15595 HP3987H DERIE(3435.001.10 Scan 141
Exp. No: 319 SUB 5.18 min.



SAMPLE SPECTRUM (UNALYSED)

File: V02534 13493 HP3987H DERIE(3435.001.10 Scan 141
Exp. No: 2521



Data File: V02534:102 Quant Output File: V02534:01

Name: 17737

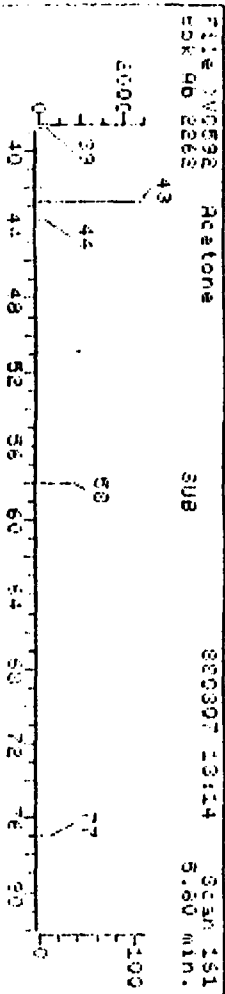
Mass: HP3987H DERIE(3435.001.100)P1

Quant Time: 890419 15:51 Quant ID File: IDVML:EX

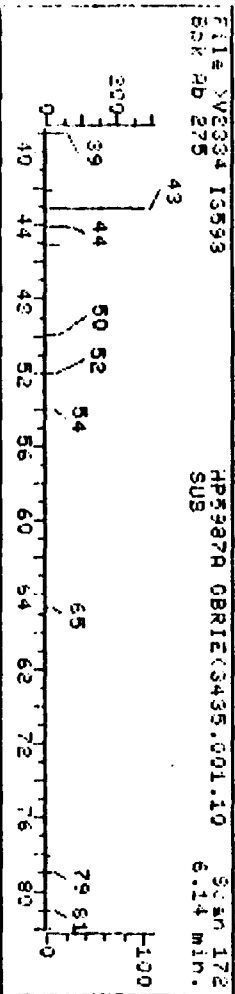
Injected at: 890419 15:45 Last Calibration: 890419 10:59

Compound No: 4
 Compound Name: Methylene Chloride
 Scan Number: 141
 Retention Time: 5.18 min.
 Quant Ion: 54.0
 Area: 5012
 Concentration: 5.59 NG
 q-value: 71

REFERENCE STANDARD SPECTRUM

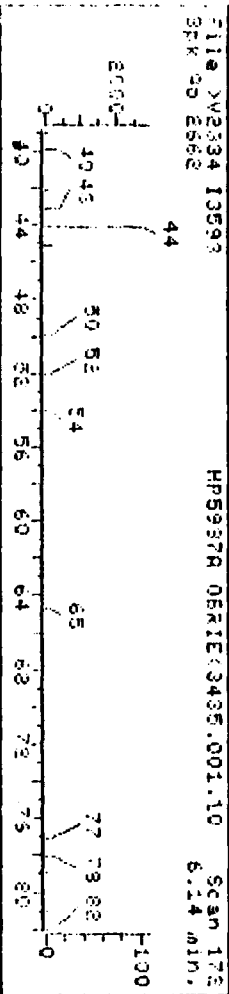


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



X

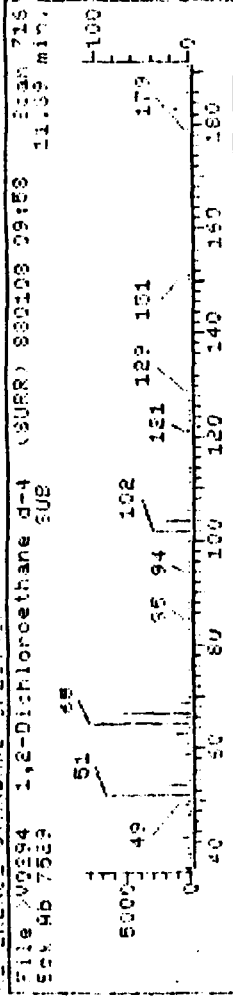
SAMPLE SPECTRUM (UNFILTERED)



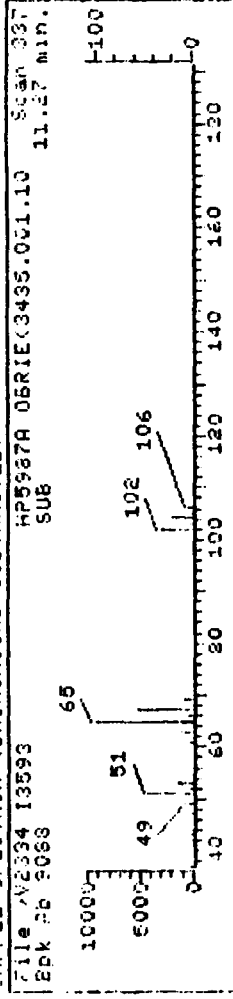
Data File: V02334:02 Quant Output File: V02334:01
 Name: I2597
 MS0: HPS937A QBRIE(3435.001.100)P1 Quant ID File: I00ML:EX
 Quant Time: 290419 16:51 Last Calibration: 600419 10:59
 Injected at: 890419 15:45

Compound No: 7
 Compound Name: Acetone
 Scan Number: 172
 Retention Time: 6.14 min.
 Wavenumber: 43.0
 Concentration: 17.47 NG
 q-value: 52

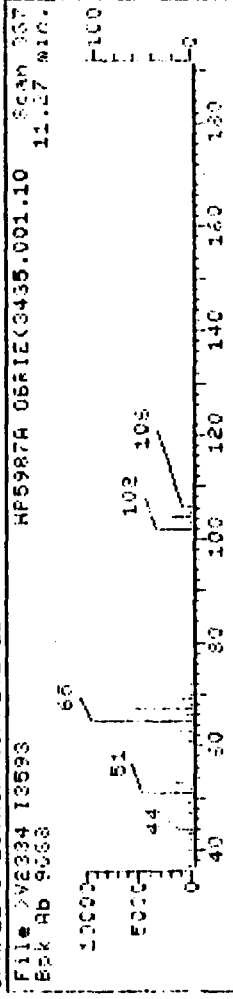
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >V2334:02

Quant Output File: >V2334:01

Name: 13593

Misc: HP5987A 06R1E(3435.004.100)P1

Quant Time: 890419 16:51

Quant IO File: IOVML:EX

Injected at: 890419 15:45

Last Calibration: 890419 10:58

Compound No: 17

Compound Name: 1,2-Dichloroethane-d4

Scan Number: 337

Retention Time: 11.27 min.

Quant Ion: 55.0

Area: 105016

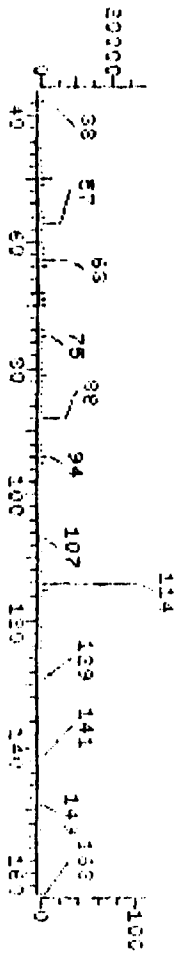
Concentration: 217.92 NG

Quality: 86

REFERENCE STANDARD SPECTRUM

File >V08234 1,4-DIFLUOROBENZENE SUB
SPEK RB 26202

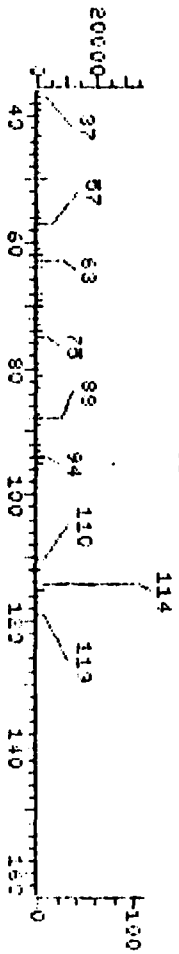
18.66 02:58 Scan 575
18.80 min.



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File >V23334 13593
SPEK RB 33040

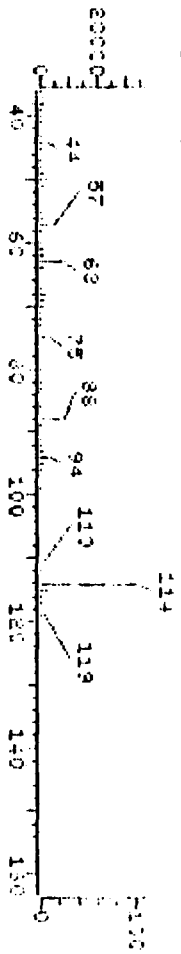
HP5997A DERIV(3435.C01.10 Scan 575
SUB 18.66 min.



SAMPLE SPECTRUM (UNALTERED)

File >V23334 13593
SPEK RB 33040

HP5997A DERIV(3435.C01.10 Scan 575
SUB 18.66 min.



Data File: >V23334:02 Quant Output File: >V23334:01

Name: I7593

Miss: HP5997A DERIV(3435.C01.10)81

Quant Time: 890419 18:51 Quant ID File: I00814:14

Injected at: 890419 15:45 Last Calibration: 890419 11:52

Compound No: 18 (1STD)

Compound Name: 1,4-Difluorobenzene

Scan Number: 575

Retention Time: 18.66 min.

Quant Ion: 114.0

Area: 534418H

Concentration: 250.00 NG

Volume: 100

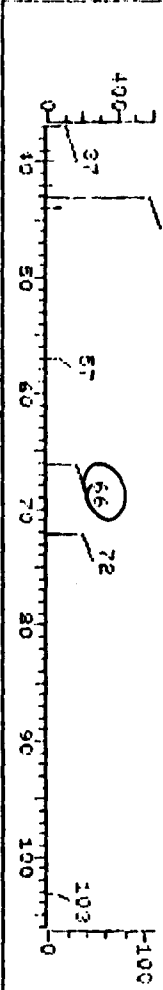
REFERENCE STANDARD SPECTRUM

File: 202592 2-Butanone (REF) SUB 300307 10:11 SCAN 323
Box: 05 7466 11.14 min.



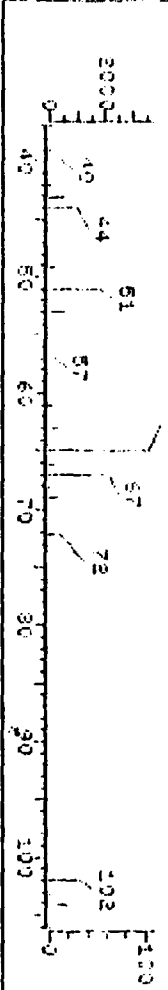
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File: 202334 13593 HP5967A OERIE(3435.001.10) F1 SCAN 342
Box: 05 545 SUB 11.36 min.



SAMPLE SPECTRUM (UNFILTERED)

File: 202334 13593 HP5967A OERIE(3435.001.10) F1 SCAN 340
Box: 05 3552 SUB 11.36 min.



Data File: 202334:02

Quant Output File: 202334:01

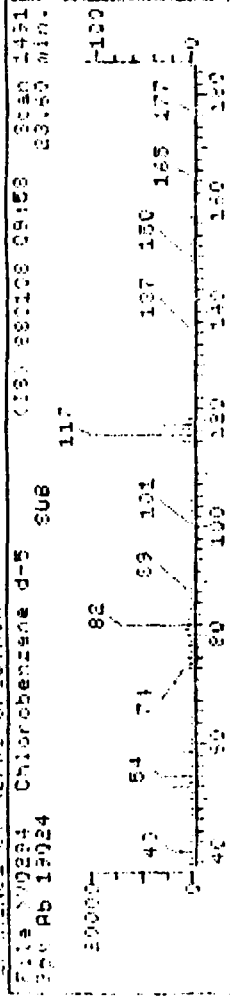
Name: 13593
 Aliso: HP5967A OERIE(3435.001.10) F1
 Quant Time: 890419 16:51
 Injected at: 890419 15:45

Quant ID File: IDVNL:EX

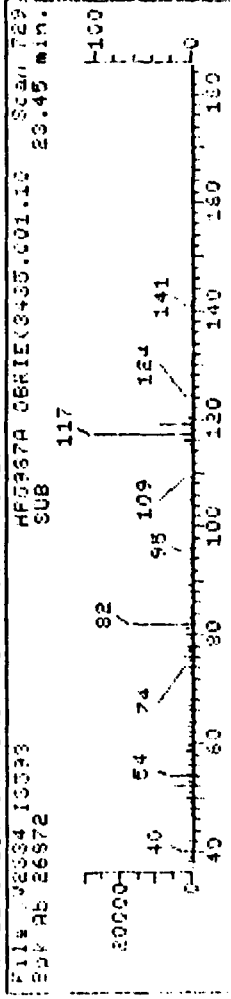
Last Calibration: 890419 10:56

Compound No: 19
 Compound Name: 2-Butanone
 Scan Number: 730
 Retention Time: 11.56 min.
 Quant Ion: 72.0
 Area: 1376
 Concentration: 21.99 NG
 g-values: 92

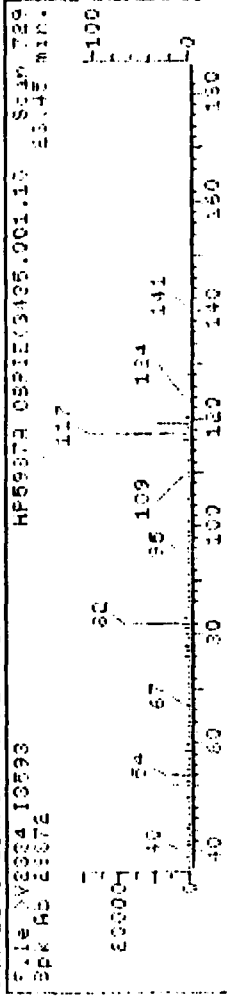
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: 002334:02

Name: 13295

Name: HP5987A 061E(3435.001.100)P1

Scan Time: 890419 16:51

Injected at: 890419 15:45

Gunnt Output File: 002334:01

Quant ID File: IDVPL:125

Last Calibration: 890412 14:35

Compound No: 32 (16TD)

Compound Name: Chlorobenzene-d5

Scan Number: 729

Detection Time: 23.45 min.

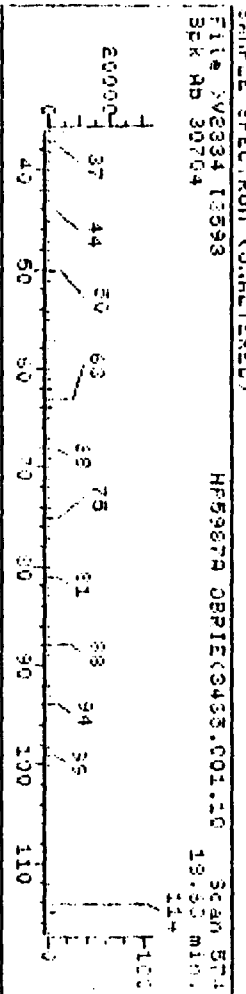
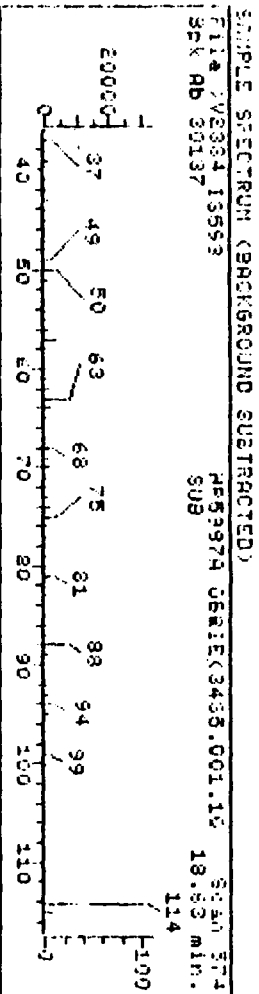
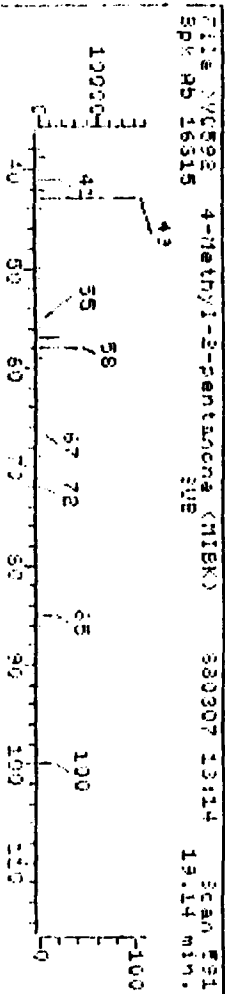
Quant Ion: 117.0

Area: 3391170

Concentration: 250.00 NG

q-value: 98

REFERENCE STANDARD SPECTRUM



Devel File: \V02334:102 Quant Output File: \V02334:101

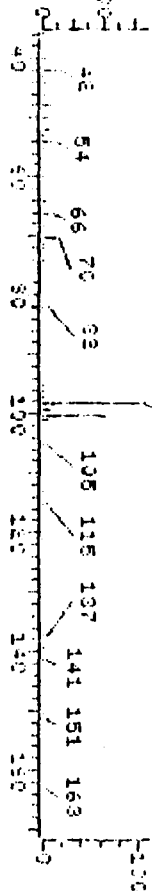
Name: 15593
 Misc: HFS987A DBP1E(3435.001.100)F1
 Quant Time: 890419 16:51 Quant ID File: 100ML:EN
 Injected at: 890419 15:45 Last Calibration: 890419 10:55

Compound No: 35
 Compound Name: 4-Methyl-2-pentanone
 Scan Number: 574
 Retention Time: 18.67 min.
 Quant Ion: 43.0
 Area: 5214
 Concentration: 9.37 NG
 q-value: 85

X

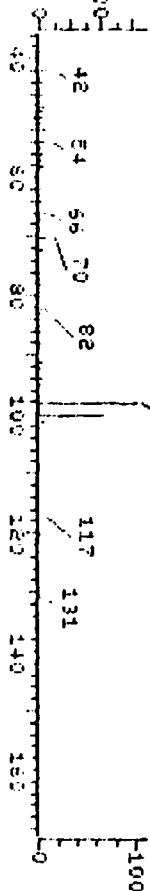
REFERENCE STANDARD SPECTRUM

File: 40234 10094 Toluene d-8 Scan 1411
SPK AB 31285 SUB (CURV) 050208 03:52 21.39 min.



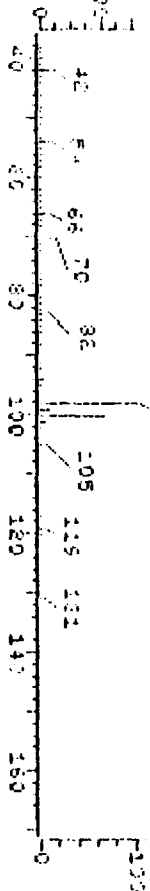
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File: 40234 10532 H05987A 05RIE(0435.001.10) Scan 650
SPK AB 31285 SUB 21.23 min.



SAMPLE SPECTRUM (UNALTERED)

File: 40234 10593 H05987A 05RIE(0435.001.10) Scan 450
SPK AB 31285 SUB 22.23 min.

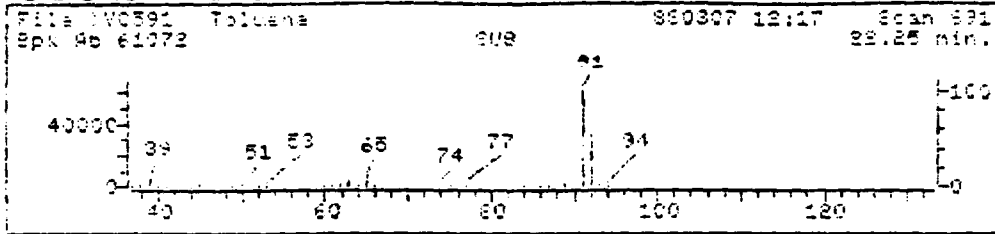


Data File: 402334:02 Quant Output File: 402334:01

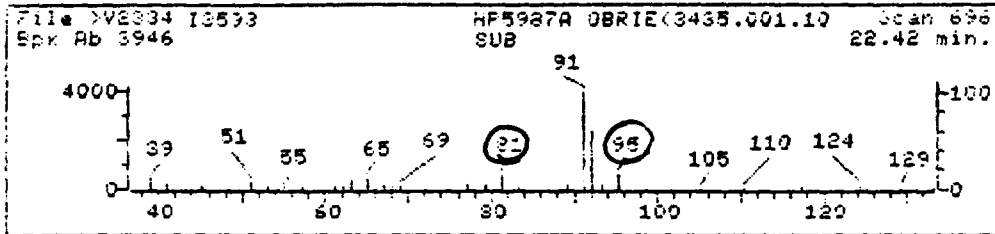
Name: 15532
MISO: H05987A 05RIE(0435.001.100)P: Quant ID File: IDVMI:EX
Quant Time: 050419 15:51 . Last Calibration: 090419 10:50
Injected at: 050419 15:45

Compound No: 57
Compound Name: Toluene-d8
Scan Number: 650
Retention Time: 22.23 min
Quant Ion: 98.0
Area: 3792441
Concentration: 215.59 mg
Z-value: 100

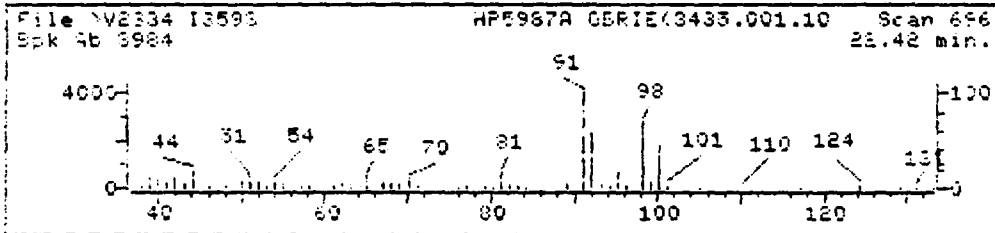
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: \V2334::D2 Quant Output File: \V2334::D1
 Name: 13593
 Misc: HP5987A DBRIE(3435.001.10)P1
 Quant Time: 890419 13:51 Quant ID File: IDVIL:EX
 Injected at: 890419 15:45 Last Calibration: 890419 10:58

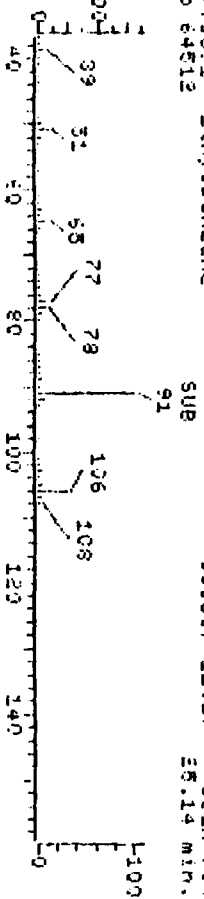
Compound No: 58
 Compound Name: Toluene
 Scan Number: 696
 Retention Time: 22.42 min.
 Quant Ion: 93.0
 Area: 27326
 Concentration: 25.16 NG
 q-value: 95

REFERENCE STANDARD SPECTRUM

File: V2591 Ethylbenzene
 Spk No 64812

93097 12:17

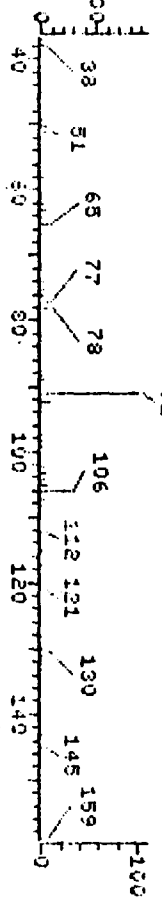
SCAN 784
 25.14 min.



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File: V2334 13893
 Spk No 5648

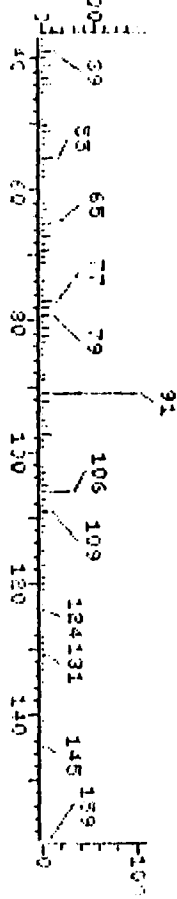
HP5987A DBRIE(3435.001.10) SUB
 25.32 min.



SAMPLE SPECTRUM (UNFILTERED)

File: V2334 13893
 Spk No 5648

HP5987A DBRIE(3435.001.10) SUB
 25.32 min.



Data File: V02354:02

Quant Output File: V02354:01

Name: 15593

Mass: HP5987A DBRIE(3435.001.100)P1

Quant Time: 890419 16:51

Quant ID File: IDUM1:EX

Injected at: 890419 15:45

Last Calibration: 890419 10:47

Compound No: 40

Compound Name: Ethylbenzene

Scan Number: 789

Retention Time: 25.32 min.

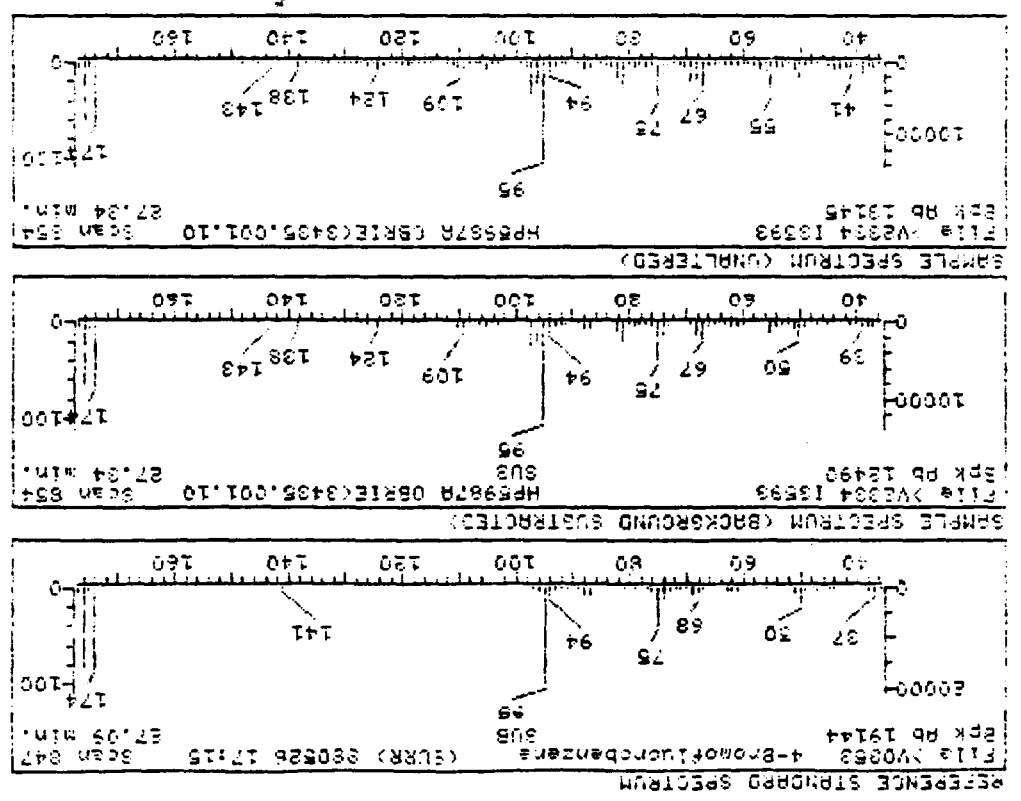
Quant Ion: 109.0

Area: 533534

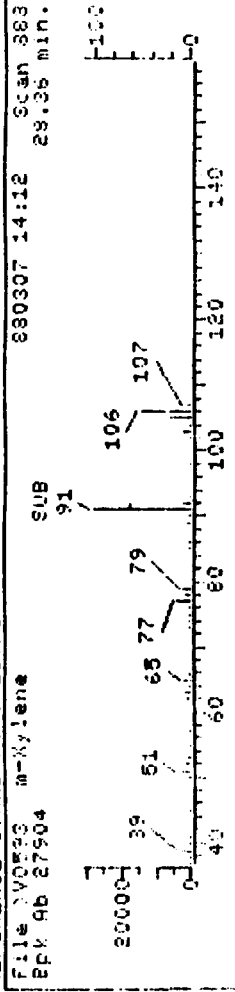
Concentration: 51.76 ug

q-value: 97

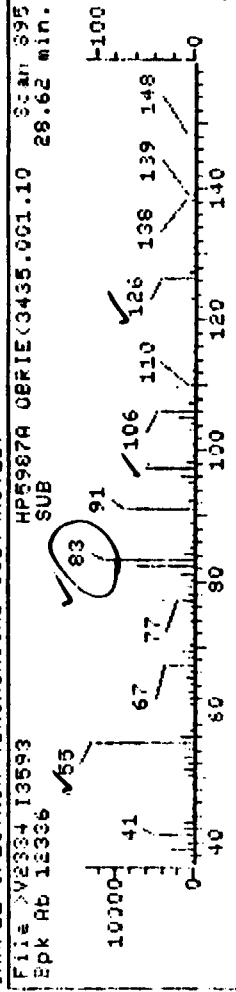
Data File: >V2334:02
 Name: 17195
 In-File: HPS67A.DSIE(3435.001.100)P1
 Quant Time: 890419 16:51
 Quant ID File: 10UM1:EN
 Last Calibration: 890419 10:53
 Compound No: 41
 Compound Name: Bromofluorobenzene
 Scan Number: 554
 Retention Time: 27.34 min.
 Quant: 25.0
 Area: 210804M
 Concentration: 246.15 NG
 g-value: 77



REFERENCE STANDARD SPECTRUM

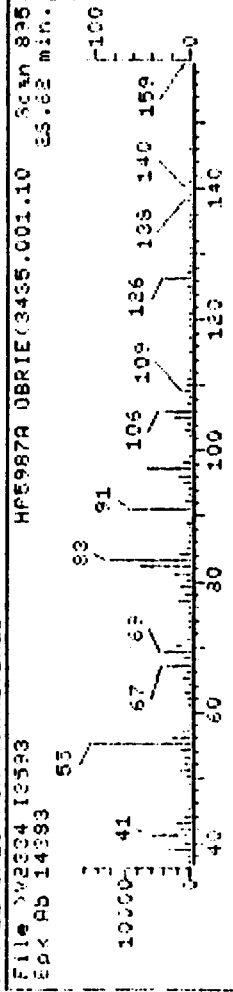


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



X hydrocarbon
 - compare with
 m-xylene MS
 sample I3590

SAMPLE SPECTRUM (UNALIERED)



Date File: VU2334::02

Name: I3593

Mass: HP5987A OBRIE(3435.001.100)P1

Subst Time: 890419 16:51

Injected at: 890419 15:45

Quant Output File: V2334::01

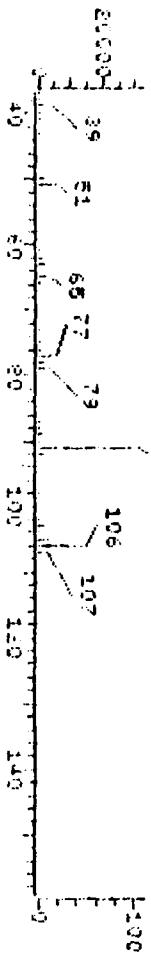
Quant ID File: IQUML:5X

Last Calibration: 890419 10:58

Compound No: 43
 Compound Name: m-Xylene
 Scan Number: 895
 Retention Time: 28.62 min.
 Query Ion: 106.0
 Area: 77228M
 Concentration: 82.37 NS
 q-value: 94

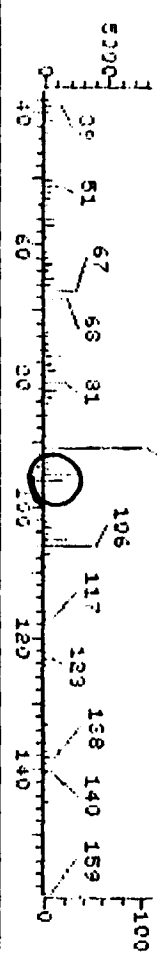
REFERENCE STANDARD SPECTRUM

File: \V02592 3- and p-Xylene SUB 890307 13:14 Scan 919
Srk Ab 30024 91 29.05 min.



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

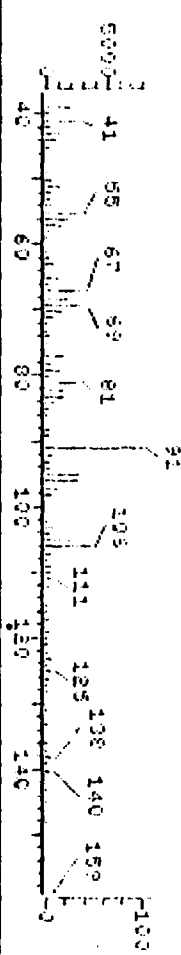
File: \V02594 13593 HP5987A DBRIE(3435.001.10) SUB 919
Srk Ab 7503 Scan 919 29.37 min.



*10/12/1998
m/s/af*

SAMPLE SPECTRUM (UNFILTERED)

File: \V02594 13593 HP5987A DBRIE(3435.001.10) SUB 919
Srk Ab 7503 Scan 919 29.37 min.



Date File: \V025354::D2

Quant Output File: \V025354::D1

Name: 13593

File: HP5987A DBRIE(3435.001.100)P1

Event Time: 890419 16:51

Quant ID File: ICUML:EX

Injected at: 890419 15:45

Last Calibration: 890419 10:53

Compound No: 44

Compound Name: Xylene (total)

Scan Number: 919

Retention Time: 29.37 min.

Quant ID: 102.0

Area: 75009

Concentration: 96.08 mg

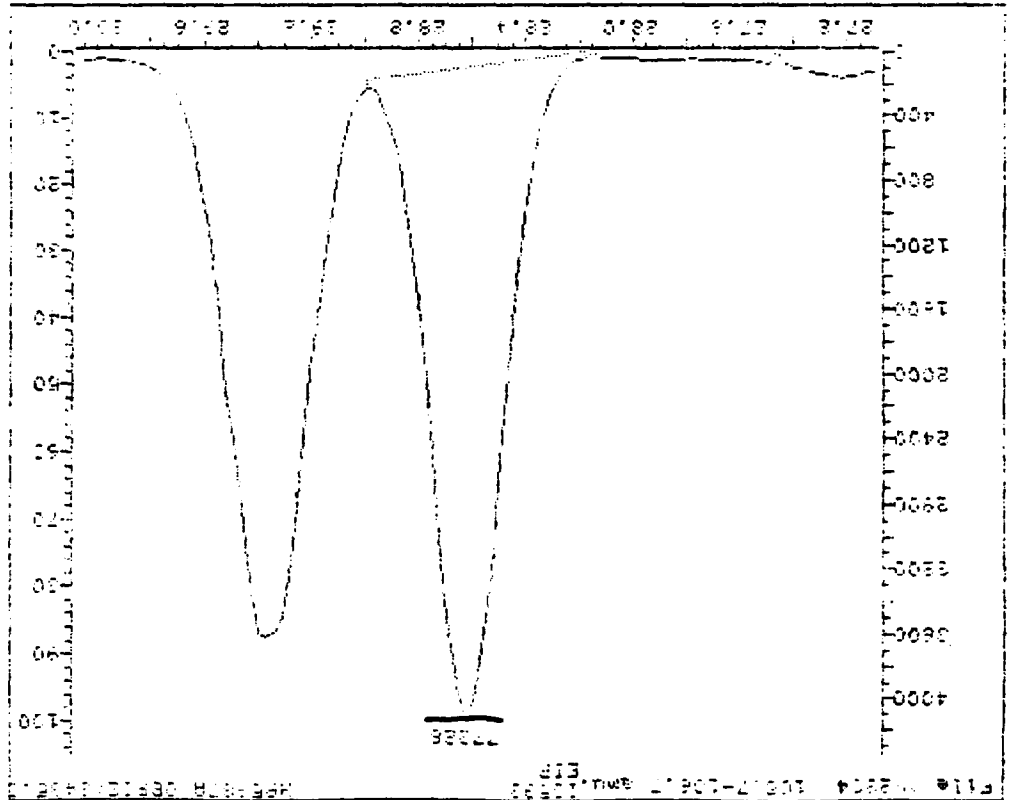
F-value: 94

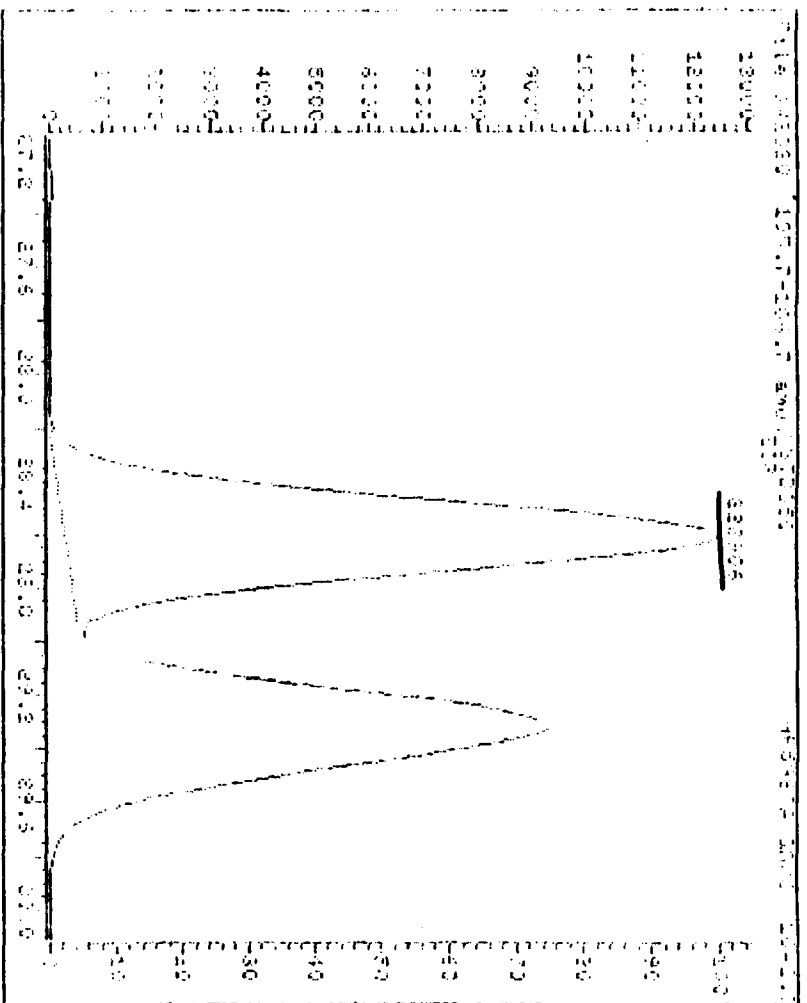
This report was produced by DAREA on: 890425 15:30

Compound No: 41
 Compound Name: m-Xylene
 Scan Number: 195
 Retention Time: 25.52 min
 Quant Ion: 106.0
 Area: 772284
 Concentration: 82.57 ug
 g-value: 54

Data File: 002334:02
 Name: 15533
 Misc: HFE878 08AIE(3435,100,100)F1
 Quant Time: 890419 16:51
 Quant ID File: 10601:02
 Last Calibration: 890419 10:50

Injected at: 890419 15:45
 Quant Output File: 002334:01





Data File: 8025520:1.D2 Quant Output File: 8025520:1.D2
 Name: 0518056
 List: 8058874 057300(1042.097,500)PI Quant ID File: 100MID:199
 Quant Time: 850418 10:15 Last Calibration: 800418 08:44
 Injected at: 890418 09:15

Compound No: 45
 Compound Name: m-xylene
 Acc. Number: 885
 Retention Time: 25.61 min.
 Quant Ion: 106.0
 Mass: 228706M
 Concentration: 254.92 NG
 P-value: 90

This report was produced by CAREM on: 890425 15:33

data file header from : IV2334

Sample: 13593 Operator: KAREN MS 4/19/89 15:44

File: HP5987A DBRIE(3435.001.100)P1

MS model: 37 SWHM rev: 1A ALS #: 0

Method file: CLP00A Tuning file: M78713 No. of extra records: 2

Source temp.: 200 Analyzer temp.: 280 Transfer line temp.: 280

Chromatographic temperatures : 45. 230. 0 0. 0
Chromatographic times, min. : 3.0 15.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 8.0 0.0 0.0 0.0 0.0

IV2334 13593 HP5987A DBRIE(3435.001.100)P1

37.00 260.0 CLP ADC TID

Slope: .01 Area Reject: 53551. Max Peaks: 10 Bunching: 1

Slope: -.01 Results File IV2334 Sorted by Time/Area INT

Peak #	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	25.00	755	779	790	37579	938179	595315	17.20	7.15%
2	26.16	805	818	824	21868	761855	411114	10.30	2.13%
3	28.84	924	938	842	20718	1093645	452449	11.34	2.34%
4	30.53	936	950	985	108549	6927544	3726354	93.44	19.34%
5	31.92	985	1001	1016	25888	2695297	711707	17.84	3.43%
6	33.42	1017	1049	1081	42182	4663993	1732707	44.63	9.73%
7	34.44	1085	1092	1124	79184	2301735	3993155	100.00	20.37%
8	36.54	1124	1143	1187	45703	4399136	1772233	44.42	9.32%
9	38.43	1167	1210	1211	54040	4631718	2093994	52.45	10.55%
10	38.99	1211	1228	1255	71760	7279435	3667954	91.92	17.03%

Sum of corrected areas: 19296735.

Summary of Unknowns PBM Library Search and Quantitation

Standard	Concentration	Area	Retention Time	Unknown Window
1	250.0	535509.	8.47	1.85 - 15.07
2	250.0	895215.	13.66	13.57 - 21.03
3	250.0	1105996.	23.45	21.05 - 39.93

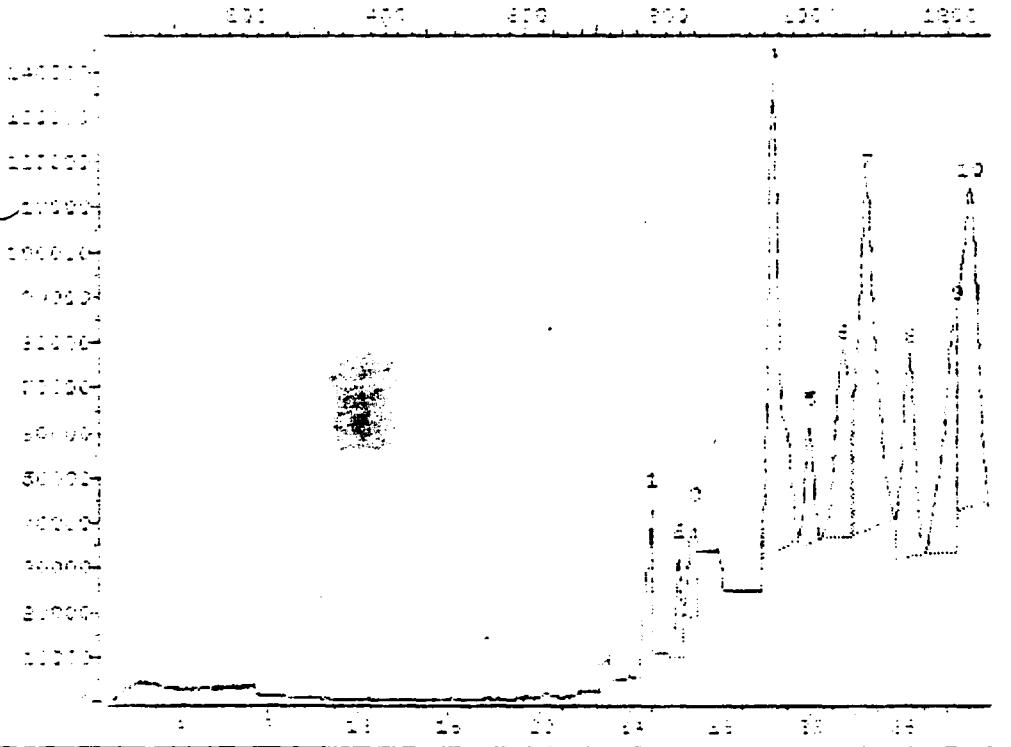
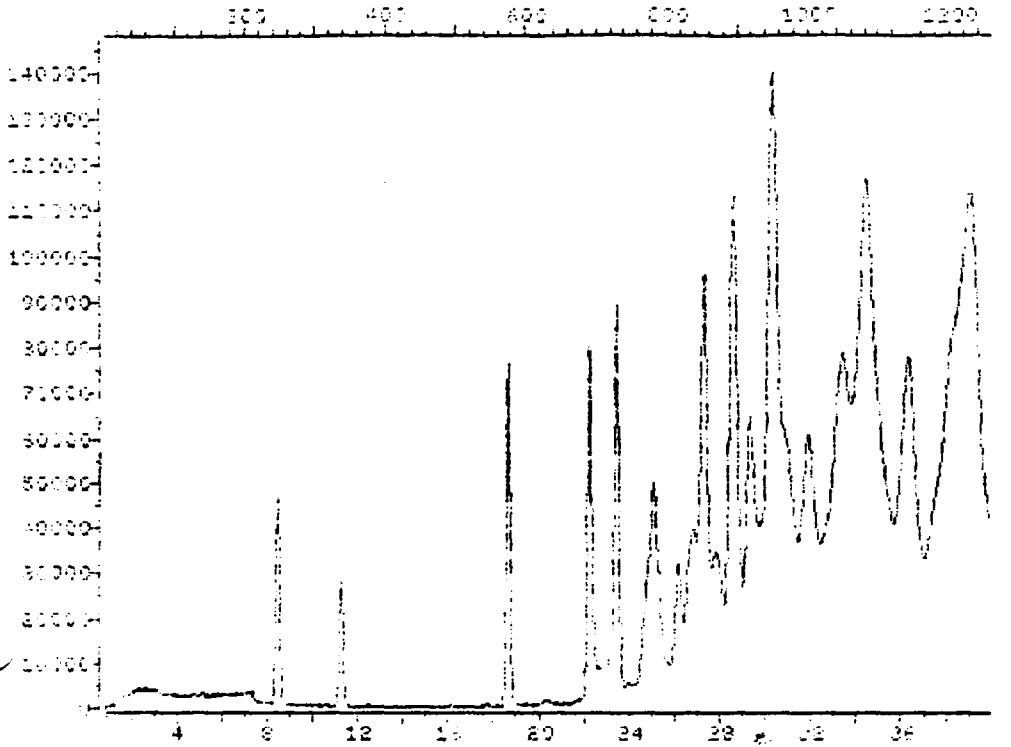
Dilution Factor (DF) = 1.00 Fractional Solids (FS) = 1.00
Amount Method (AM) = 1000.00 Amount Used (AU) = 1000.00

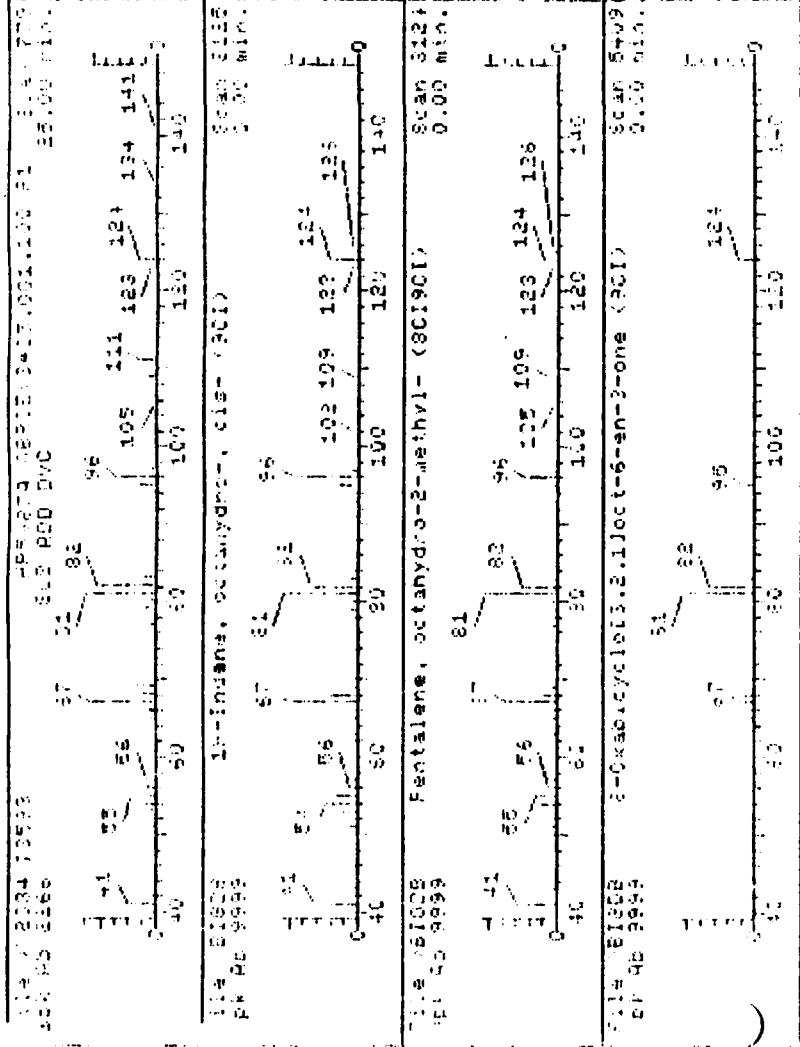
Correction Factor = 1.00 = (AM / AU) / (DF * FS)

Unknown Concentration = $\frac{\text{Conc Int Std}}{\text{Area Int Std}} \times \text{Area Unk} \times \text{Correction Factor}$

4:12 PM THU , 27 APR , 1989

$$\text{Factor} = \frac{10000}{100} \times \frac{1}{3.9661} \times \frac{1}{0.541} = 46.606$$





X

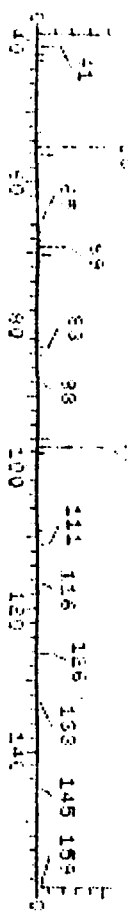
Area = 680319 Tentative Concentration is 150.00

1. 1-m-Indene, octahydro-, cis- (9CI)
2. Pentalene, octahydro-2-methyl- (8CI9CI)
3. 2-Oxabicyclo[3.2.1]oct-6-en-3-one (9CI)
4. Pentalene, octahydro-1-methyl- (8CI9CI)
5. 1,5-Heptadiene, (Z)- (8CI9CI)
6. 3-Heptyne (8CI9CI)
7. Cyclopentane, 1-methyl-2-methylene- (9CI)

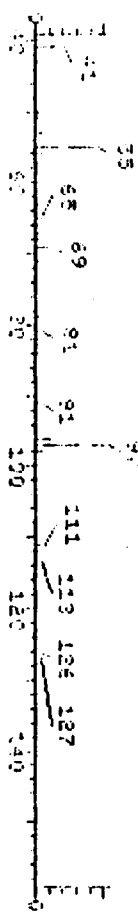
- 124 0.9813
- 124 0.9813
- 124 0.7893
- 124 0.7413
- 96 0.7413
- 81 0.6810
- 93 0.7413

Sample file: >02334 Spectrum #: 779
 Scan speed: 3 Tilting option: N No. of ion ranges searched: 1

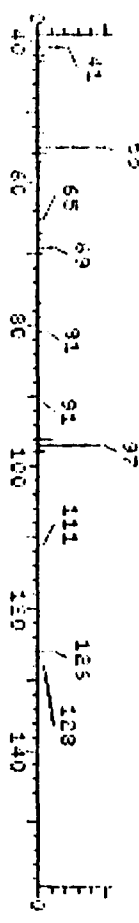
Peak	CON #	RCOT	K	DK	#FLS	TILT	%	CON	CI	RI
45*	4851513	"81008	47	73	0	0	50	44	17	59
46*	3868642	"81008	50	61	2	0	55	31	15	35
50*	4645373	"81009	29	31	0	0	100	40	17	17
50*	32273771	"81008	39	36	1	0	99	40	10	10
55*	7736547	"81008	19	50	3	0	550	47	17	10
55*	619494	"81008	23	95	0	0	31	47	17	10
54*	4115643	"81008	40	37	1	0	100	45	17	10



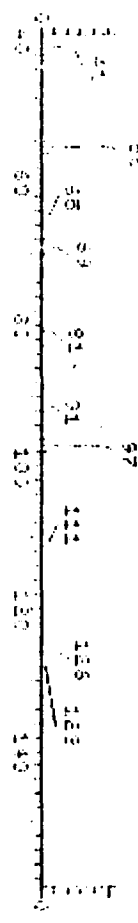
File # 81638 C/cyclohexane, 1-ethyl-2-methyl- (801901) Scan 8245
 02:00 3899 000 000 000 26:15 000



File # 81638 C/cyclohexane, 1-ethyl-4-methyl-, trans- (801901) Scan 8307
 02:00 3899 000 000 000 26:15 000



File # 81638 Cyclohexane, 1-ethyl-4-methyl-, cis- (801901) Scan 8308
 02:00 3899 000 000 000 26:15 000



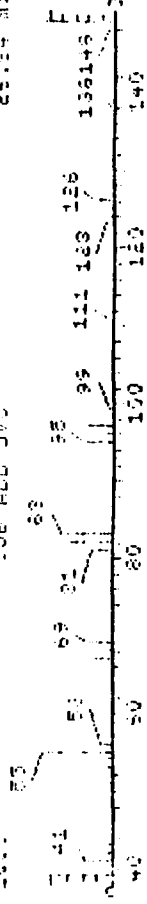
Unknown # 12
 Area = 411114.0 Tentative Concentration is 93.00

- 1 Cyclohexane, 1-ethyl-1-methyl- (801901) 126 0.9416
- 2 Cyclohexane, 1-ethyl-4-methyl-, trans- (801901) 126 0.9416
- 3 Cyclohexane, 1-ethyl-4-methyl-, cis- (801901) 126 0.9416
- 4 3-Heptanone, 5-methylene- (801901) 126 0.9416
- 5 1,4-Pyrazole, 5-ethyl-4,5-dihydro-3,5-dimethyl- (9011) 126 0.9416
- 6 Cyclohexane, 1-ethyl-2-methyl-, cis- (801901) 126 0.9416
- 7 Cyclohexane, 3,4,4-trimethyl- (9011) 126 0.9416

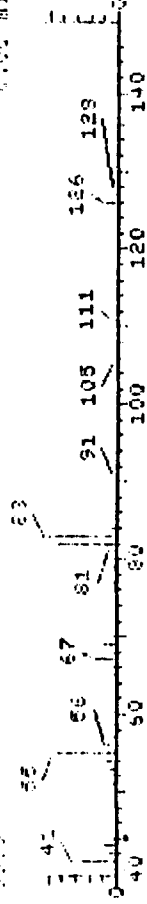
Sample file: X02334 Spectrum #: 816
 Number scans: 5 Tiltting option: N No. of ion ranges searched: 15

Scan #	Area	CON #	ROOT	X	SR	#PLS	TILT	Z	CON	Q.I	R.I.D.
71*	4926903	8246	"81638	57	34	0	0	34	59	0.9	0.9
70*	6236880	8507	"81638	60	33	1	0	81	58	0.9	0.9
69*	4926787	8506	"81638	51	45	1	0	73	58	0.9	0.9
68*	20590704	8197	"81638	26	49	3	0	95	58	0.9	0.9
67*	21291026	8321	"81638	29	48	3	0	107	58	0.9	0.9
66*	2525777	8305	"81638	45	47	2	0	97	58	0.9	0.9
65*	57541195	8320	"81638	40	52	2	0	109	58	0.9	0.9

File 261804 2693
 SUB PCD DMC
 26.94 min.



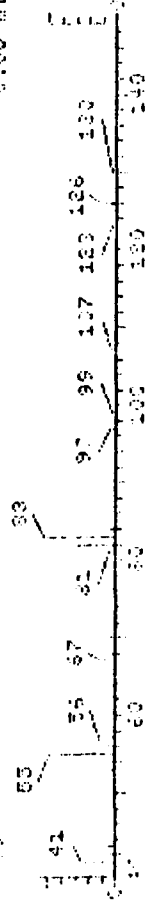
File 261808
 SUB PCD DMC
 26.94 min.



File 261808
 SUB PCD DMC
 26.94 min.



File 261808
 SUB PCD DMC
 26.94 min.



Area = 43246.0 Tentative Concentration is 100.00
 Unknown #.5

1. Cyclohexane, (1-methylethyl)- (9CI)
2. Cyclopentane, (2-methylpropyl)- (9CI)
3. Cyclohexane, propyl- (8CI9CI)
4. Cyclohexane, 2-ethyl- (8CI9CI)
5. 2(5H)-Furanone, 3,5,5-trimethyl- (9CI)
6. Pyridine, 2,3,4,5-tetrahydro- (8CI9CI)
7. 2-Pyrazoline, 1-methyl-4-propyl- (8CI)

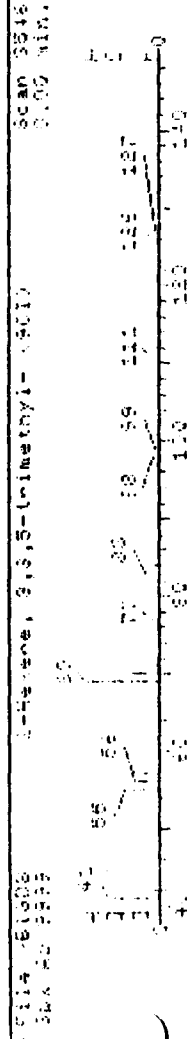
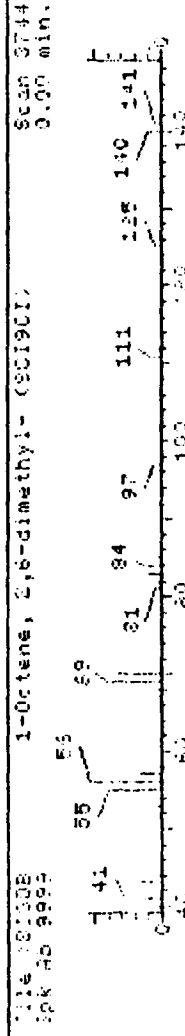
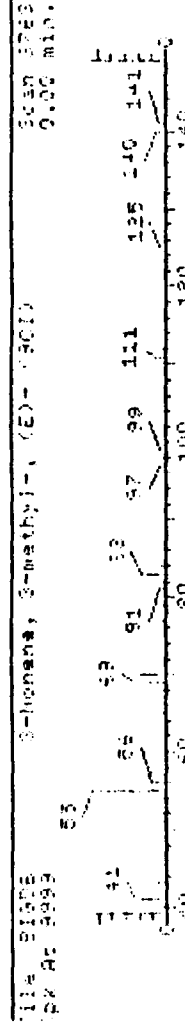
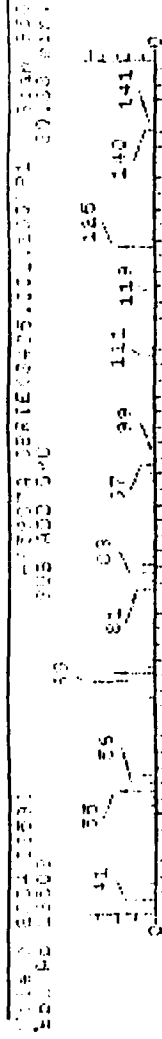
115 26412
 123 26412
 135 26412
 145 26412
 153 26412
 155 26412
 126 26412

Sample file: 402334 Spectrum #: 832

Search speed: 3 Tilting option: N

No. of ion ranges returned: 37

Prob.	CR#	CON #	ROOT	K	DK	#FLG	TILT	X	CON	CL	RL
47*	876297	5414	"81608	41	62	0	0	53	44	16	16
27*	3755327	5415	"81608	50	69	0	0	105	59	10	10
25*	1678928	5525	"81608	35	61	0	0	59	46	10	10
25*	4423745	8537	"81608	22	95	0	0	101	51	7	7
20*	5059250	10609	"81608	22	63	0	0	101	54	5	5



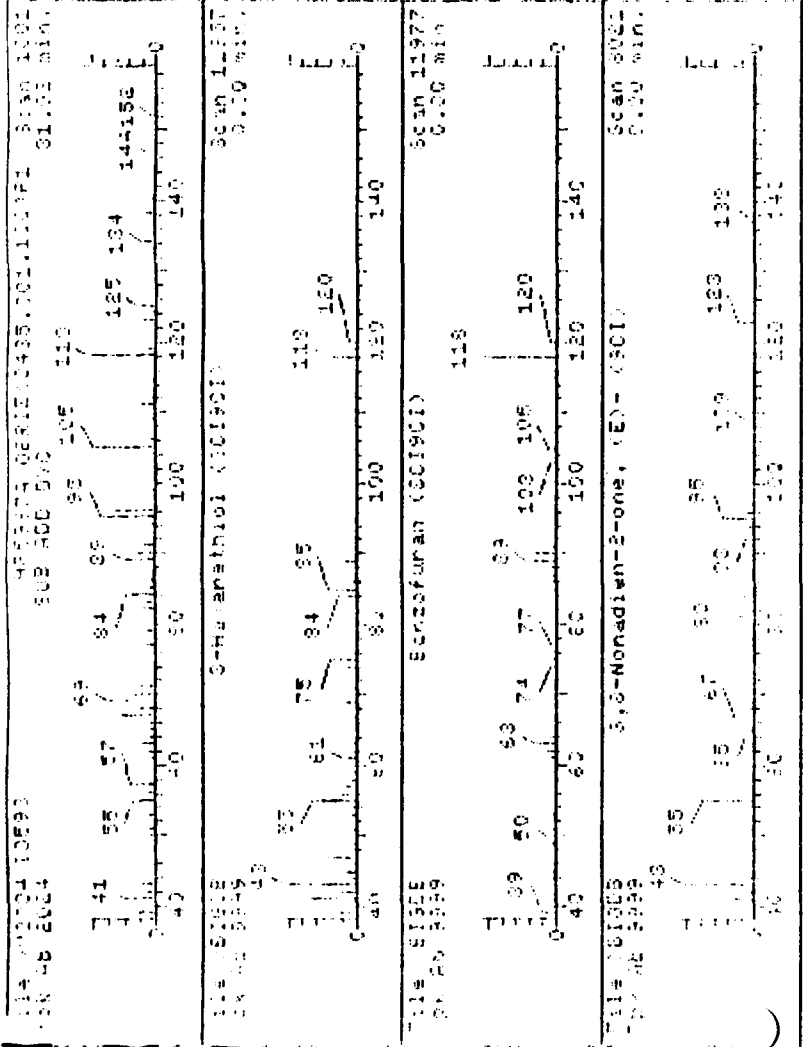
Area = 372533. Tentative Concentration is 340.00

1. 3-bromonane, 3-methyl-, (2S)- (SCI9CI)
2. 1-Octene, 2,6-dimethyl-, (SCI9CI)
3. 1-hexene, 3,3,5-trimethyl-, (SCI9CI)
4. Cyclopropane, 1,2-dimethyl-3-pentyl-, (SCI9CI)
5. Cyclopropane, 1,2-dimethylbutyl-, (SCI9CI)
6. 1-Decene (SCI9CI)
7. Cyclohexane, 1-ethyl-2,3-dimethyl-, (SCI9CI)

140 310823
140 310823
125 310823
140 310823
140 310823
140 310823
140 310823

Sample file: 019012.D Spectrum #: 370 No. of ion ranges searched: 11
Search speed: 3 Tilting option: N

RT	CON #	RT	CON #	#FID	TILT	X	CON	CL	RT
3.53	3753	"31008	43	5	0	100	34	3.53	3.53
3.74	3744	"31008	31	33	0	100	46	3.74	3.74
3.94	3548	"31008	50	55	0	100	31	3.94	3.94
4.15	3756	"31008	37	64	0	100	38	4.15	4.15
4.35	10546	"31008	33	33	0	100	34	4.35	4.35
4.51	3739	"31008	39	33	0	100	34	4.51	4.51
4.65	10593	"31008	31	33	0	100	34	4.65	4.65

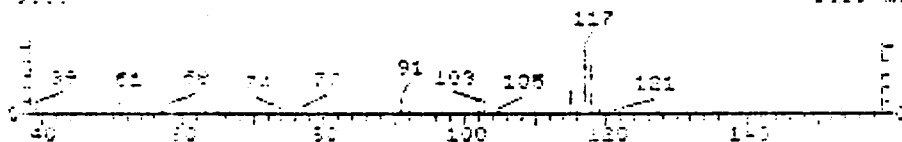
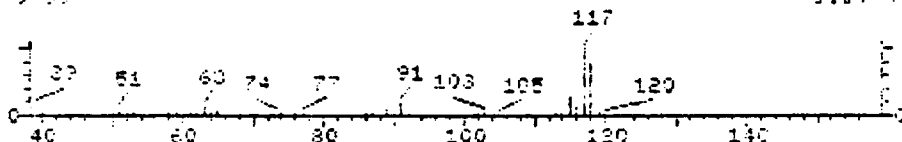
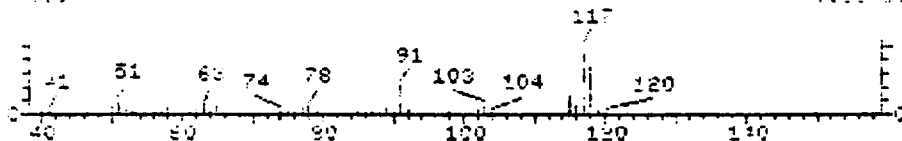
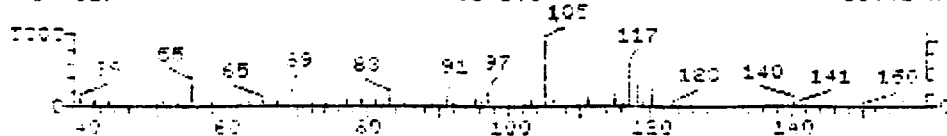


File: 11977 11977
 Scan: 11977
 0.00 min.
 Tentative Concentration is 100.0

- 1. 3-Hydroxyethanol (C3H8O2)
- 2. Benzofuran (C8H6O)
- 3. 3,3-Nonadien-2-one, (E)- (C9H14O)

Sample file: 201234 Spectrum #: 1001
 Search speed: 3 Tilting options: 4 No. of 100 ranges searched: 37

Prod. CAS # CON # ROOT K DK #FLG TILT # CON #1 #2 #3
 10* 1533905 11957 181908 14 97 3 0 100 97 3



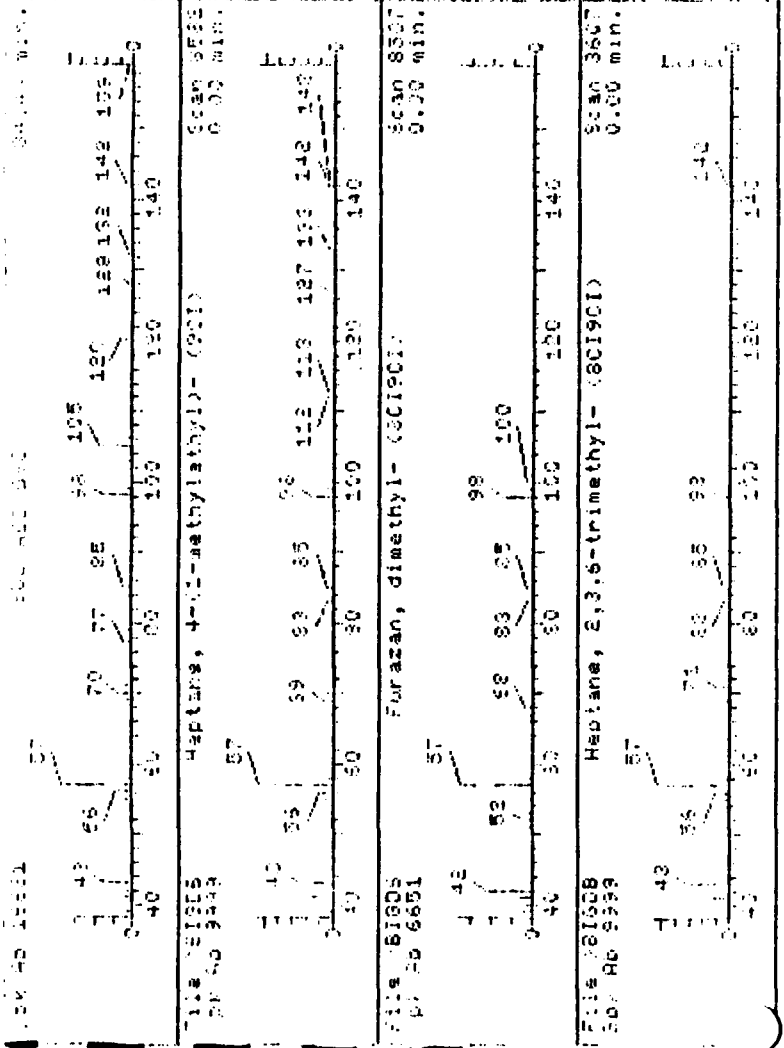
Unknown #.5

Area = 1732797 Tentative Concentration is 100.00

- | | | |
|--|-----|--------|
| 1. Benzene, cyclopropyl- (901901) | 119 | 09810 |
| 2. 1H-Indene, 2,3-dihydro- (901) | 118 | 09810 |
| 3. Benzene, 1-ethenyl-2-methyl- (901) | 110 | 09810 |
| 4. Benzene, 1,1'-(1-ethenyl-1,3-propanediyl)bis- (901) | 222 | 017815 |
| 5. Benzene, 2-propenyl- (901) | 113 | 09810 |
| 6. Benzene, 1-ethenyl-3-methyl- (901) | 119 | 09810 |
| 7. Benzene, ethenylmethyl- (901) | 115 | 09810 |

Sample File: >01534 Spectrum #: 1047
 Search speed: 3 Tilting option: N No. of ion ranges searched: 27

	PK#	CAS #	CON #	ROOT	K	DN	#PLG	TILT	X	CON	Q11	Q12
1.	40*	273494	11986	"BIGDB	63	32	2	0	49	50	17	17
2.	32*	496117	11979	"BIGDB	53	34	1	0	44	34	9	47
3.	20*	611154	11961	"BIGDB	26	32	0	0	42	31	7	19
4.	10	11141977	12001	"BIGDB	67	46	1	0	54	33	5	17

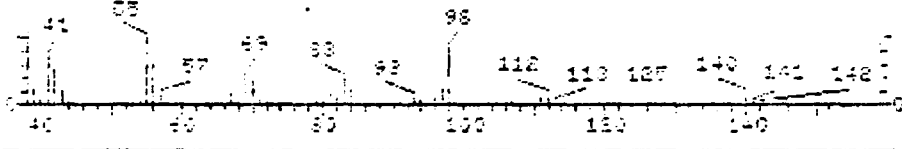
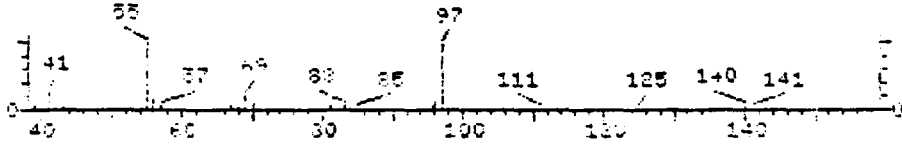
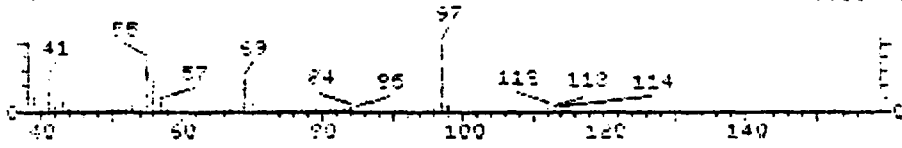
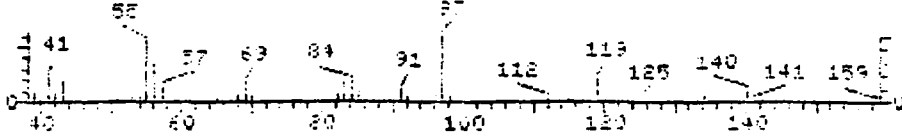


Name: Unknown #7
 Conc: 3.2015e. Tentative Concentration is 200.00

1. Heptane, 4-(1-methylethyl)- (9CI)
2. Furazan, dimethyl- (8CI9CI)
3. Heptane, 2,3,6-trimethyl- (8CI9CI)
4. Octane, 3-methyl- (9CI9CI)
5. Heptane, 2,3,5-trimethyl- (8CI9CI)
6. Octane, 2,3,6-trimethyl- (8CI9CI)
7. Cyclopentanol, 2-chloro-, trans- (8CI9CI)

Sample file: 202334 Spectrum #: 1082
 Search speed: 3 Tilting option: N No. of ion ranges searched: 32

Prob.	CAS #	CON #	ROOT	K	OK	#LG	TILT	%	CON	CHI	RLI
31*	52396874	6582	"B16DB	57	46	1	0	34	43	3	3
27*	4275217	8207	"S160B	22	69	2	0	150	58	10	10
25	4032933	3607	"B150B	52	30	2	0	97	48	1	1
23	4116333	8731	"B16DB	43	41	1	0	70	43	7	7
24	20273357	1205	"B150B	49	50	0	0	79	51	7	7
24*	15827340	11043	"B150B	42	44	1	0	70	50	7	7
20*	20377804	1215	"B150B	26	52	3	0	100	54	3	3



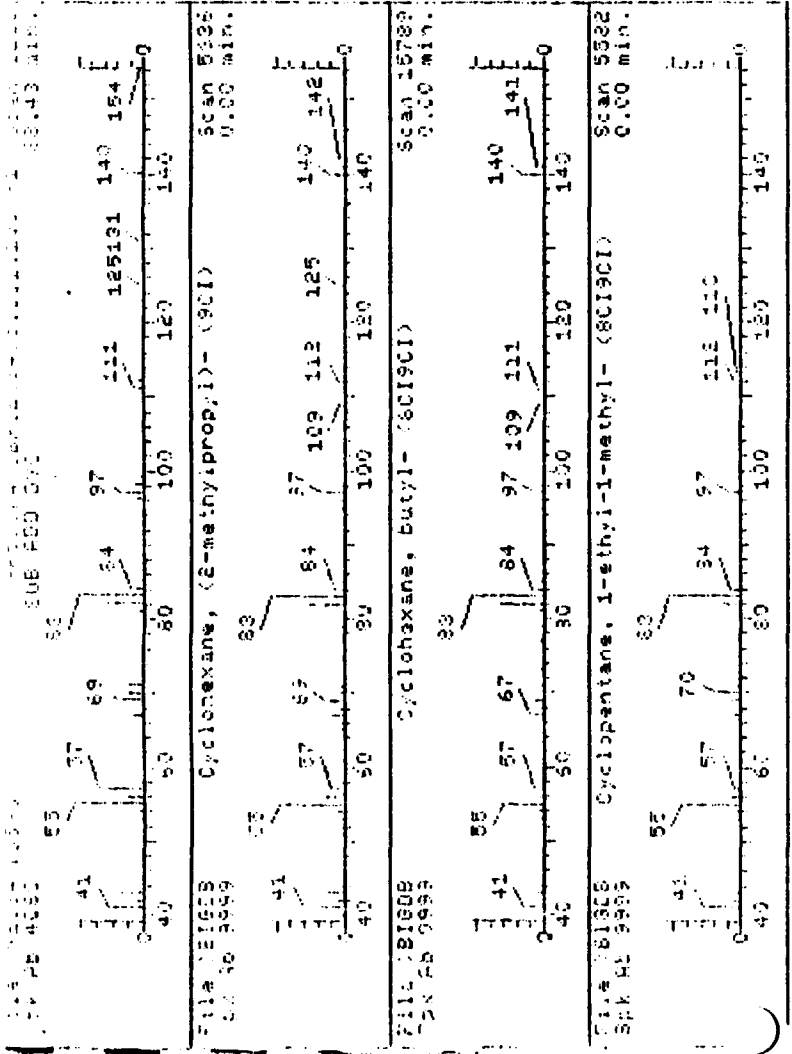
Unknown #. 3

Area = 1772233. Tentative Concentration is 400.00

- 1. Cyclohexane, 1,1-dimethyl- (801901) 112 02011
- 2. Cyclohexane, 1-methyl-2-propyl- (801901) 141 010-20
- 3. Cyclooctanone, 2-methyl- (801901) 140 024130
- 4. 1H-1,2,4-Triazole, 3-ethyl- (901) 97 048780
- 5. Cycloheptane, methyl- (801901) 112 02011
- 6. 3-Hexene, 3-ethyl-2,5-dimethyl- (901) 140 010220
- 7. Cyclohexane, 1-ethyl-2-methyl-, trans- (801901) 126 02410

Sample file: >V2534 Spectrum #: 1143
 Search speed: F Tilting option: N No. of ion ranges searched: 1

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	Q1	R1
1.	33*	590669	8257	"B1908	43	55	1	0	91	42	12	12
2.	32*	4391796	8741	"B1908	40	49	1	0	35	45	11	10
3.	27*	10385276	8551	"B1908	71	90	3	0	91	10	10	11
4.	26*	7411167	8083	"B1908	26	59	2	0	159	42	3	14
5.	16	4128787	8219	"B1908	61	65	2	0	34	44	3	11
6.	25*	51338083	8356	"B1908	41	58	3	0	91	44	3	13
7.	15	4318783	8211	"B1908	50	73	1	1	100	47	1	11



Area = 2093274. Tentative Concentration is 470.00

- 1. Cyclohexane, (2-methylpropyl)- (9CI) 140 0.0020
- 2. Cyclohexane, butyl- (8CI9CI) 140 0.0020
- 3. Cyclopentane, 1-ethyl-1-methyl- (8CI9CI) 112 0.0015
- 4. 3,4,4a,5a-tetrahydronaphthalene, 1,3-dimethyl- (9CI) 140 0.000202
- 5. Cyclohexane, propyl- (8CI9CI) 133 0.0018
- 6. Cyclohexane, 3,3,3-trimethyl- (8CI9CI) 140 0.0016
- 7. Cyclopentane, 1-ethyl-3-methyl-, cis- (8CI9CI) 112 0.0010

Sample File: 102734 Spectrum #: 1210 No. of Ion Ranges searched: 1

Search Speed: 5 Filtering options: N

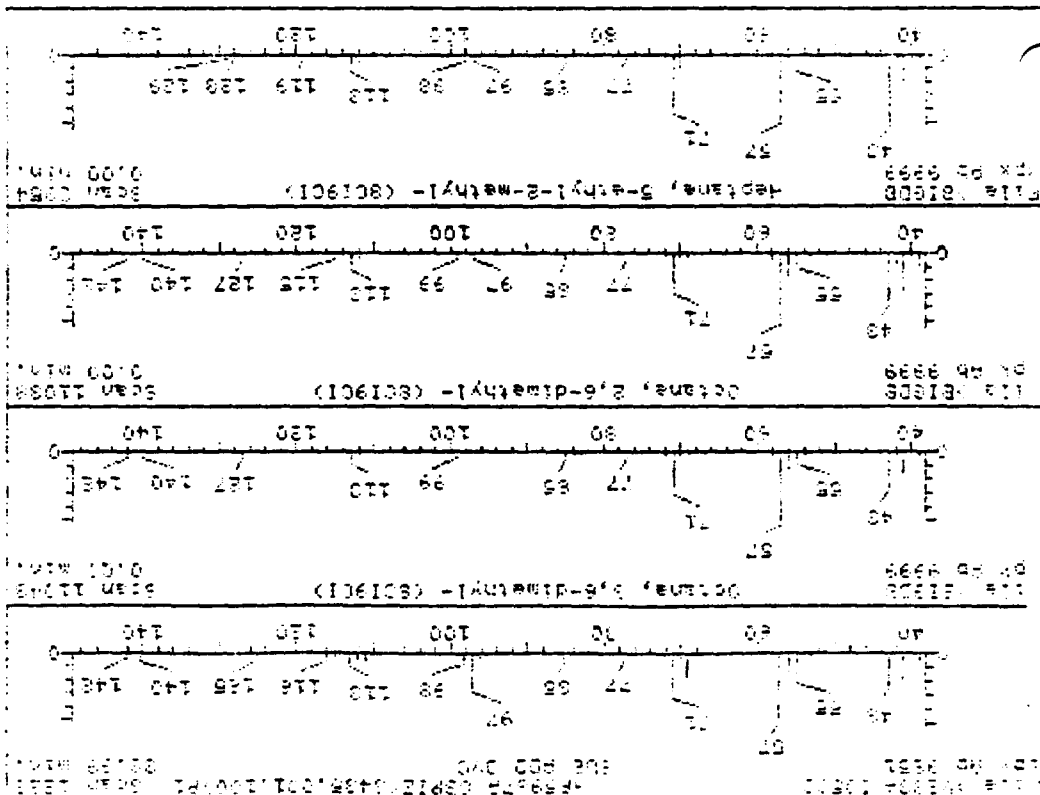
Scan	MS #	CCN #	RCOT	K	EK	#FG	TILT	X	COI	Q1	T1
34*	1678984	8055	"81000	33	20	0	0	15	17	17	17
38*	1678959	15739	"81000	33	60	0	0	60	17	17	17
39*	16747505	15362	"81000	25	20	0	0	25	17	17	17
40	874146	13787	"81000	47	40	0	0	44	17	17	17
41	1678928	5625	"81000	48	49	0	0	45	17	17	17
42*	875949	5635	"81000	33	74	0	0	33	17	17	17
43*	2015365	5611	"81000	23	60	0	0	23	17	17	17

Peak #	Retention Time (min)	Area	Height	Width	Integration	Response	Height	Width	Integration	Response
1	11.043	11038	11038	0.21	0	0	0	0	0	0
2	11.038	11038	11038	0.27	2	0	0	0	0	0
3	11.038	11038	11038	0.48	48	1	1	1	1	1
4	11.038	11038	11038	0.22	22	0	0	0	0	0
5	11.038	11038	11038	0.22	22	0	0	0	0	0
6	11.038	11038	11038	0.22	22	0	0	0	0	0
7	11.038	11038	11038	0.22	22	0	0	0	0	0
8	11.038	11038	11038	0.22	22	0	0	0	0	0
9	11.038	11038	11038	0.22	22	0	0	0	0	0
10	11.038	11038	11038	0.22	22	0	0	0	0	0
11	11.038	11038	11038	0.22	22	0	0	0	0	0
12	11.038	11038	11038	0.22	22	0	0	0	0	0
13	11.038	11038	11038	0.22	22	0	0	0	0	0
14	11.038	11038	11038	0.22	22	0	0	0	0	0
15	11.038	11038	11038	0.22	22	0	0	0	0	0
16	11.038	11038	11038	0.22	22	0	0	0	0	0
17	11.038	11038	11038	0.22	22	0	0	0	0	0
18	11.038	11038	11038	0.22	22	0	0	0	0	0
19	11.038	11038	11038	0.22	22	0	0	0	0	0
20	11.038	11038	11038	0.22	22	0	0	0	0	0
21	11.038	11038	11038	0.22	22	0	0	0	0	0
22	11.038	11038	11038	0.22	22	0	0	0	0	0
23	11.038	11038	11038	0.22	22	0	0	0	0	0
24	11.038	11038	11038	0.22	22	0	0	0	0	0
25	11.038	11038	11038	0.22	22	0	0	0	0	0
26	11.038	11038	11038	0.22	22	0	0	0	0	0
27	11.038	11038	11038	0.22	22	0	0	0	0	0
28	11.038	11038	11038	0.22	22	0	0	0	0	0
29	11.038	11038	11038	0.22	22	0	0	0	0	0
30	11.038	11038	11038	0.22	22	0	0	0	0	0
31	11.038	11038	11038	0.22	22	0	0	0	0	0
32	11.038	11038	11038	0.22	22	0	0	0	0	0
33	11.038	11038	11038	0.22	22	0	0	0	0	0
34	11.038	11038	11038	0.22	22	0	0	0	0	0
35	11.038	11038	11038	0.22	22	0	0	0	0	0
36	11.038	11038	11038	0.22	22	0	0	0	0	0
37	11.038	11038	11038	0.22	22	0	0	0	0	0
38	11.038	11038	11038	0.22	22	0	0	0	0	0
39	11.038	11038	11038	0.22	22	0	0	0	0	0
40	11.038	11038	11038	0.22	22	0	0	0	0	0

Sample filter: 00234 Spectrum #: 1228
 Station speed: 3 Titrating options: N
 No. of injections: 1

Unknown #10 Area = 507554. Tentative Concentration is 850.00

- 1. Decane, 2,6-dimethyl- (8C19C1)
- 2. Decane, 2,6-dimethyl- (8C19C1)
- 3. Decane, 2,6-dimethyl- (8C19C1)
- 4. Decane, 2,6-dimethyl- (8C19C1)
- 5. Decane, 2,6-dimethyl- (8C19C1)
- 6. Decane, 2,6-dimethyl- (8C19C1)
- 7. Decane, 2,6-dimethyl- (8C19C1)
- 8. Decane, 2,6-dimethyl- (8C19C1)
- 9. Decane, 2,6-dimethyl- (8C19C1)
- 10. Decane, 2,6-dimethyl- (8C19C1)
- 11. Decane, 2,6-dimethyl- (8C19C1)
- 12. Decane, 2,6-dimethyl- (8C19C1)
- 13. Decane, 2,6-dimethyl- (8C19C1)
- 14. Decane, 2,6-dimethyl- (8C19C1)
- 15. Decane, 2,6-dimethyl- (8C19C1)
- 16. Decane, 2,6-dimethyl- (8C19C1)
- 17. Decane, 2,6-dimethyl- (8C19C1)
- 18. Decane, 2,6-dimethyl- (8C19C1)
- 19. Decane, 2,6-dimethyl- (8C19C1)
- 20. Decane, 2,6-dimethyl- (8C19C1)
- 21. Decane, 2,6-dimethyl- (8C19C1)
- 22. Decane, 2,6-dimethyl- (8C19C1)
- 23. Decane, 2,6-dimethyl- (8C19C1)
- 24. Decane, 2,6-dimethyl- (8C19C1)
- 25. Decane, 2,6-dimethyl- (8C19C1)
- 26. Decane, 2,6-dimethyl- (8C19C1)
- 27. Decane, 2,6-dimethyl- (8C19C1)
- 28. Decane, 2,6-dimethyl- (8C19C1)
- 29. Decane, 2,6-dimethyl- (8C19C1)
- 30. Decane, 2,6-dimethyl- (8C19C1)
- 31. Decane, 2,6-dimethyl- (8C19C1)
- 32. Decane, 2,6-dimethyl- (8C19C1)
- 33. Decane, 2,6-dimethyl- (8C19C1)
- 34. Decane, 2,6-dimethyl- (8C19C1)
- 35. Decane, 2,6-dimethyl- (8C19C1)
- 36. Decane, 2,6-dimethyl- (8C19C1)
- 37. Decane, 2,6-dimethyl- (8C19C1)
- 38. Decane, 2,6-dimethyl- (8C19C1)
- 39. Decane, 2,6-dimethyl- (8C19C1)
- 40. Decane, 2,6-dimethyl- (8C19C1)



Forms VI, VII, VIII

Initial Calibration Data
MSL Compounds

Case No: _____ Instrument ID: HP 5987A
 Contractor: ORG Laboratories, Inc Calibration Date: 04/18/89
 Contract No: _____

Minimum RF for SPC is 0.300 Maximum % RSD for CCC is 30.0%

Compound	Laboratory ID:					RRT	RF	% RSD	CCC	SPCC
	U2315	U2314	U2316	U2317	U2318					
	RF	RF	RF	RF	RF					
Chloromethane	.72814	.56639	.74475	.70579	.68303	.130	.68482	10.156		**
Bromomethane	2.01382	1.59068	1.83815	1.83732	1.77946	.213	1.81189	8.375		
Vinyl Chloride	1.82822	1.68787	1.69872	1.73986	1.71848	.288	1.71685	4.666		*
Chloroethane	1.38986	1.12891	1.28772	1.18621	1.21304	.385	1.20915	5.411		
Methylene Chloride	2.81872	1.78248	1.81727	1.82484	1.79487	.613	1.84345	5.473		
Acetone	.67520	.49797	.51837	.51519	.50934	.728	.54322	13.657		
Carbon Disulfide	4.79811	4.33784	4.47731	4.46852	4.49774	.776	4.51414	3.781		
Trichlorofluoromethane-Freon11	2.16977	1.94882	1.84855	1.88076	1.90656	.848	1.94983	6.548		
1,1-Dichloroethane	1.65148	1.49492	1.56588	1.54481	1.54623	.935	1.56864	3.659		*
1,1-Dichloroethane	2.97841	2.59954	2.84252	2.86231	2.80748	1.093	2.81645	4.817		**
1,2-Dichloroethane (total)	1.77381	1.61398	1.71538	1.68675	1.71941	1.179	1.70169	3.416		
1,1,1-Trichloroethane (Freon 113)	2.49681	2.35835	2.74824	2.47164	2.63183	1.284	2.59977	5.133		(Conc=99.0, 247.5, 495.0, 742.5)
1,2-Dichloroethane-d4	1.69677	1.55383	1.68746	1.58644	1.58385	1.329	1.60541	3.387		
1,2-Dichloroethane	1.99258	1.88927	1.81384	1.84121	1.84262	1.341	1.85985	4.874		
2-Chloroethylvinyl ether	.20192	.18987	.20628	.21098	.21775	2.040	.20518	5.238		
2-Butanone	.85883	.84417	.84428	.84778	.84498	.618	.84798	15.814		
1,1,1-Trichloroethane	.52082	.48189	.46655	.47635	.45624	.673	.48805	5.862		
Carbon Tetrachloride	.39772	.36875	.36236	.37834	.36238	.693	.37389	3.978		
Acetone	.49445	.42983	.46830	.47141	.46619	.708	.46609	4.986		
1,1-Dichloroethane	.63324	.57547	.56665	.58528	.57169	.728	.58646	4.689		
1,2-Dichloropropane	.45828	.39868	.40196	.41546	.40164	.796	.41361	5.196		*
cis-1,3-Dichloropropane	.72317	.66182	.67175	.69448	.67124	.812	.68432	3.641		(Conc=128.0, 388.0, 688.0, 988.0)
Trichloroethane	.44197	.39754	.40939	.42265	.39969	.848	.41425	4.441		
Benzene	1.28681	1.07741	1.11516	1.13971	1.06341	.864	1.12858	5.881		
Dibromochloromethane	.47598	.44523	.44435	.45784	.44783	.877	.45447	2.829		
trans-1,3-Dichloropropane	.49177	.45713	.46596	.48883	.47758	.888	.47359	2.771		(Conc=88.0, 288.0, 488.0, 688.0)
1,1,2-Trichloroethane	.41782	.36814	.36791	.39102	.36829	.881	.37884	5.517		
Acetone	.34377	.38494	.41272	.42971	.42183	1.018	.42747	4.642		**
4-Methyl-2-pentanone	.36813	.29332	.32616	.33720	.34726	.826	.33441	8.279		

RF - Response Factor (Subscript is amount in M)

RRT - Average Relative Retention Time (RT Std/RT Istd)

RF - Average Response Factor

%RSD - Percent Relative Standard Deviation

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Initial Calibration Date
HSL Compounds

Case No: _____

Instrument ID: HP 5967A

Contractor: NRC Laboratories, Inc

Calibration Date: 6/18/99

Contract No: _____

Minimum RF for SPC is 0.300 Maximum % RSD for CIC is 38.0%

Compound	Laboratory ID: VU2315				VU2314				VU2316				VU2317				VU2318			
	RF	RF	RF	RF	RF	RF	RF	RF	RF	RF	RF	RF	RF	RF	RF	RF	RF	RF	RF	RF
100.00	250.00	500.00	500.00	750.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00

Compound	RF	RF	RF	RF	RF	RF	RF	RF	RF	RF	RF	RF	RF	RF	RF	RF	RF	RF	RF	RF	% RSD	CIC	SPCC	
2-Hexanone	.28937	.23401	.25521	.28043	.28376	.891	.26956	8.697																
Tetrachloroethene	.37929	.36235	.37628	.35422	.36149	.905	.36671	2.094																
1,1,2,2-Tetrachloroethane	.72489	.59809	.65663	.66973	.69207	.907	.66828	7.033																**
Chloroform	1.46191	1.40845	1.40072	1.37915	1.39849	.948	1.40944	2.209																
Tri-n-Pentane	.93142	.85894	.91215	.85652	.85029	.956	.88157	4.249																*
Tri-n-Hexane	1.11992	1.05402	1.08561	1.05158	1.05841	1.005	1.07212	2.802																**
Ethylbenzene	.56974	.49683	.52348	.51010	.51639	1.088	.51734	3.948																
Propylbenzene	.75337	.67241	.69614	.66882	.66894	1.166	.68494	3.378																
Styrene	1.25481	1.10854	1.14824	1.14138	1.14352	1.211	1.16308	4.224																
m-Xylene	.81143	.77103	.74077	.73399	.75595	1.220	.75249	4.675																
Xylene (Total)	.65194	.59523	.61020	.60359	.62488	1.251	.61715	3.489																

(Conc=100.4,251.0,502.0,7

RF - Response Factor (Subscript is amount in Ng)

RT - Average Relative Retention Time (RT Std/RT 1Std)

RF - Average Response Factor

RSD - Percent Relative Standard Deviation

CIC - Calibration Check Compounds (*) SPC - System Performance Check Compounds (**)

QUANT REPORT

Operator ID: KAREN
 Output File: ^U2315::D1
 Data File: >U2315::D2
 Name: USTD020
 Misc: HP5987A QA/QC(1042.097.300)P1

Quant Rev: 6 Quant Time: 890417 13:56
 Injected at: 890417 12:53
 Dilution Factor: 1.00000

ID File: IDVML:EX
 Title: CLP VOA ID FILE (PACKED COLUMN)
 Last Calibration: 890417 12:35

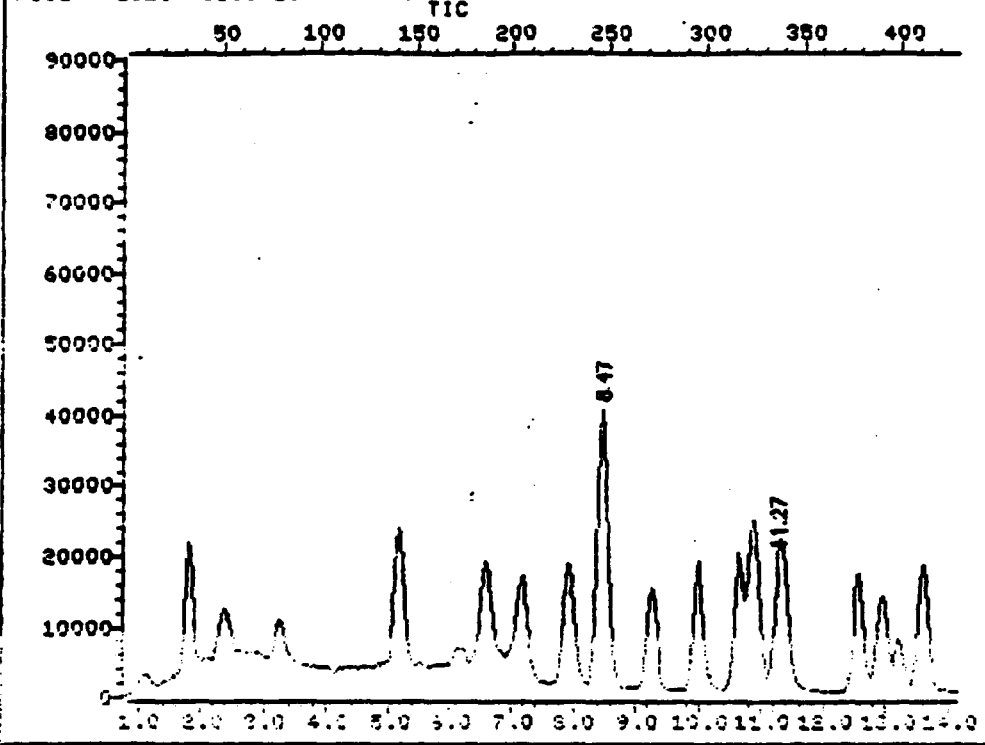
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	8.47	128.0	71538	250.00	NG	98
2)	Chloromethane	1.10	50.0	20607	44.88	NG	99
3)	Bromomethane	1.79	94.0	58929M	340.67	NG	91
4)	Vinyl Chloride	2.35	62.0	52315M	237.82	NG	98
5)	Chloroethane	3.25	64.0	37482	135.18	NG	99
6)	Methylene Chloride	5.18	84.0	57766	162.29	NG	68
7)	Acetone	6.17	43.0	19321	135.95	NG	94
8)	Carbon Disulfide	6.58	76.0	137299M	206.66	NG	96
9)	Trichlorofluoromethane-Freon11	7.20	101.0	62074	94.46	NG	98
10)	1,1-Dichloroethane	7.91	96.0	47265	109.19	NG	93
11)	1,1-Dichloroethane	9.25	63.0	94999	79.00	NG	96
12)	1,2-Dichloroethane (total)	9.92	94.0	50735M	107.87	NG	73
13)	Chloroform	10.63	83.0	92504	93.93	NG	93
14)	1,1,2-Cl3F3-Ethane (Freon 113)	10.86	101.0	76598	105.90	NG	93
15)	1,2-Dichloroethane-d4	11.27	65.0	48539M	94.56	NG	93
16)	1,2-Dichloroethane	11.36	62.0	57019	93.69	NG	94
17)	2-Chloroethylvinylether	17.43	106.0	5778	93.39	NG	89
18)	1,4-Difluorobenzene	18.67	104.0	713240M	250.00	NG	100
19)	2-Butanone	11.39	72.0	7371	135.92	NG	93
20)	1,1,1-Trichloroethane	12.57	97.0	65137	34.85	NG	93
21)	Carbon Tetrachloride	12.92	117.0	49833M	85.93	NG	99
22)	Vinyl Acetate	13.20	43.0	61978	63.36	NG	93
23)	Bromodichloromethane	13.60	83.0	79343	92.48	NG	98
24)	1,2-Dichloropropane	14.37	63.0	56408	85.50	NG	99
25)	cis-1,3-Dichloropropene	15.15	75.0	108733M	106.99	NG	95
26)	Trichloroethene	15.68	130.0	55377	113.51	NG	95
27)	Benzene	16.12	78.0	151209M	99.02	NG	100
28)	Dibromochloromethane	16.37	129.0	59628	103.91	NG	99
29)	trans-1,3-Dichloropropene	16.43	75.0	49243M	71.94	NG	92
30)	1,1,2-Trichloroethane	16.43	97.0	51725	125.18	NG	90
31)	Bromoform	19.01	172.8	42998	110.73	NG	97
32)	*Chlorobenzene-d5	25.45	107.0	281063M	250.00	NG	93
33)	4-Methyl-2-pentanone	19.38	43.0	41337M	31.33	NG	85
34)	2-Hexanone	20.80	43.0	30530M	61.82	NG	91
35)	Tetrachloroethene	21.21	164.0	42642	114.34	NG	97
36)	1,1,2,2-Tetrachloroethane	21.28	83.0	81496	116.55	NG	91
37)	Toluene-d8	22.24	98.0	164356	107.39	NG	100
38)	Toluene	22.43	92.0	104715	106.73	NG	86
39)	Chlorobenzene	23.58	112.0	103829	112.28	NG	99
40)	Ethylbenzene	25.32	106.0	61859	106.81	NG	92
41)	Bromofluorobenzene	27.34	95.0	81325M	100.98	NG	84
42)	Styrene	28.42	104.0	141072	110.98	NG	94
43)	m-Xylene	28.61	106.0	91590M	114.07	NG	94

Compound	R.T.	Q ion	Area	Conc	Units	q
44) Xylene (total)	29.33	106.0	73294M	106.23	NG	93

Compound is ISTD

TOTAL ION CHROMATOGRAM

File >V2318 35.0-260.0 amu. VST0020 HP5987A DA/DC(1042.0



Data File: V2315:02

Quant Output File: V2315:01

Name: VST0020

File: HP5987A DA/DC(1042.097.500)P1

ID File: IDVNL:054

Title: CLP USA ID FILE (PACKED COLUMN)

Last Calibration: 890417 12:35

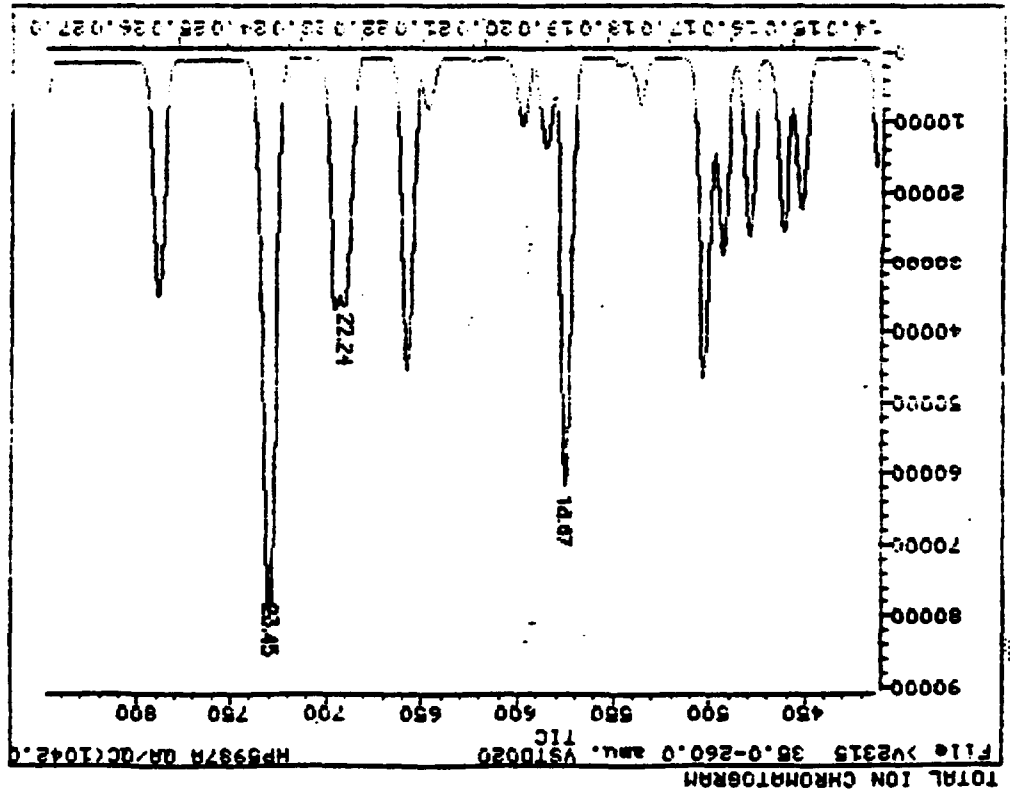
Operator ID: KAREN

Quant Time: 890417 13:56

Injected at: 890417 12:53

TIC page 1 of 3

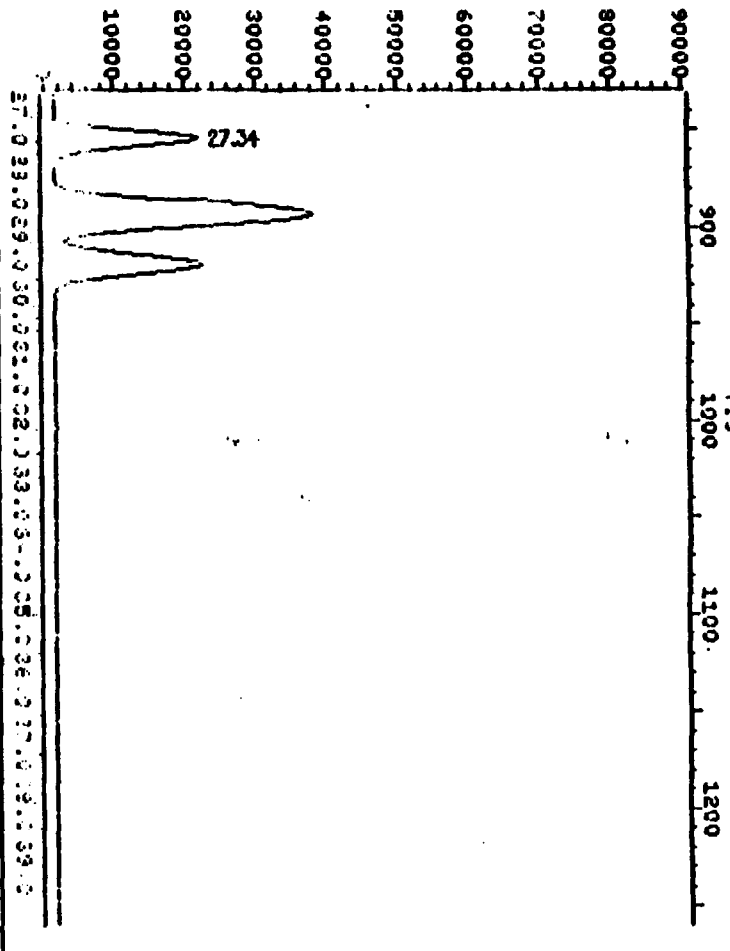
Data File: V2315:02
 Name: V21020
 Mass: HP5987A 0A/DC(1042.097,300)P1
 In File: 1000018X
 Title: QRP 00-10 FILE (PACKED COLUMN)
 Last Calibration: 890417 11:55
 Operator ID: KAREN
 Quant Time: 890417 13:58
 Injected at: 890417 12:53
 TIC page 2 of 3



TOTAL ION CHROMATOGRAM

File: YV2319 35.0-250.0 auu. VST0020

HP5987A DA/DC(1042.0



Data File: YV2319:102

Quant Output File: YV2319:101

Name: VST0020

File: HP5987A DA/DC(1042.097.1300)91

ED FILE: FOUND:EE4

File: CLP 00R 10 FILE (PACKED COLUMN)

Lab: Calibration: 890417 12:55

Operator ID: KAREN

Quant Time: 890417 13:56

Injected at: 890417 12:53

TIC page 3 of 3

QUANT REPORT

Operator ID: KAREN
 Output File: ^U2314::D1
 Data File: >U2314::D2
 Name: USTD050
 Misc: HP5987A QA/QC(1042.097.300)P1

Quant Rev: 6
 Quant Time: 890417 12:37
 Injected at: 890417 11:42
 Dilution Factor: 1.00000

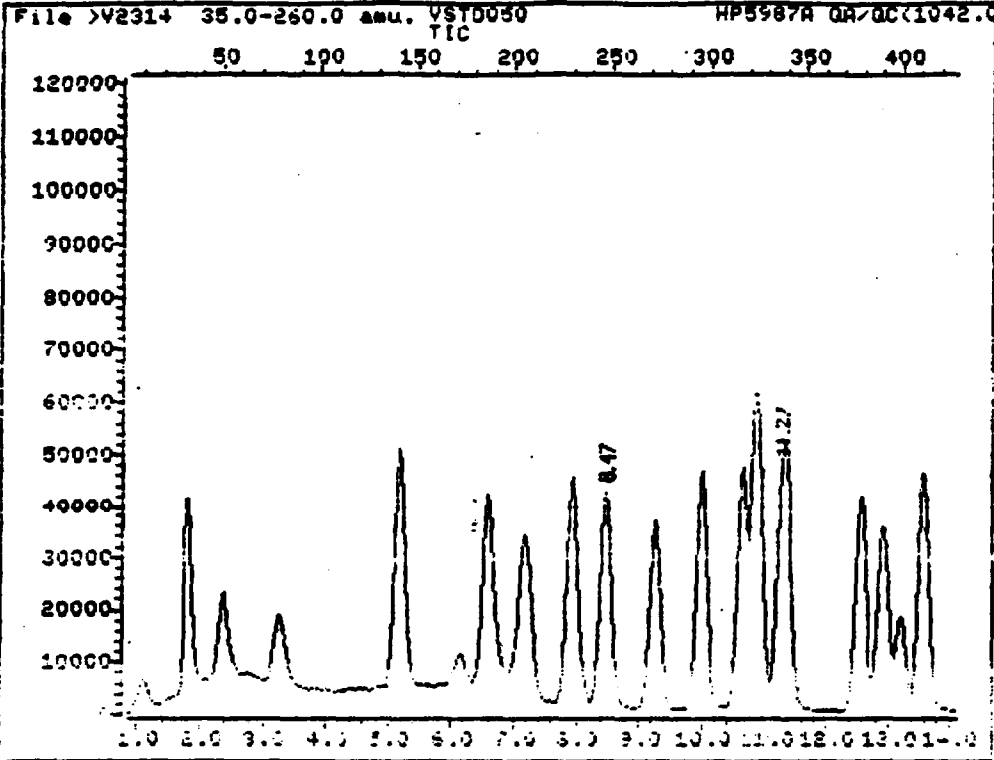
ID File: IDVML::EX
 Title: CLP VOA ID FILE (PACKED COLUMN)
 Last Calibration: 890417 12:35

	Compound	R.T.	Q ion	Area	Conc	Units	a
1)	*Bromochloromethane	8.47	128.0	73637	250.00	NG	99
2)	Chloromethane	1.10	50.0	44539M	88.24	NG	93
3)	Bromomethane	1.82	94.0	125086	657.85	NG	90
4)	Vinyl Chloride	2.38	62.0	126375	522.63	NG	98
5)	Chloroethane	3.25	64.0	88774M	291.27	NG	99
6)	Methylene Chloride	5.18	84.0	138590	354.20	NG	68
7)	Acetone	6.14	43.0	39159	250.66	NG	98
8)	Carbon Disulfide	6.58	76.0	341052M	467.01	NG	95
9)	Trichlorofluoromethane-Freon11	7.17	101.0	152557	188.92	NG	97
10)	1,1-Dichloroethene	7.95	98.0	117556	244.85	NG	93
11)	1,1-Dichloroethane	9.25	63.0	204420	172.85	NG	96
12)	1,2-Dichloroethene (total)	10.00	98.0	124912M	256.27	NG	97
13)	Chloroform	10.62	85.0	221565	204.45	NG	98
14)	1,1,2-Cl3F3-Ethane (Freon 113)	10.87	101.0	190781	236.00	NG	93
15)	1,2-Dichloroethane-d4	11.27	63.0	122126M	183.34	NG	91
16)	1,2-Dichloroethene	11.38	62.0	142256	201.50	NG	95
17)	1-Chloroethylvinylether	12.45	106.0	14863	219.79	NG	84
18)	1,4-Difluorobenzene	13.64	114.0	345519M	250.00	NG	100
19)	2-Butanone	11.40	72.0	15260	257.10	NG	93
20)	1,1,1-Trichloroethane	12.55	97.0	166223	219.58	NG	94
21)	Carbon Tetrachloride	12.92	117.0	127409M	199.25	NG	98
22)	Vinyl Acetate	13.23	43.0	148532M	138.31	NG	92
23)	Bromodichloromethane	13.57	83.0	198836	210.12	NG	99
24)	1,2-Dichloropropane	14.84	63.0	137723	189.25	NG	99
25)	cis-1,3-Dichloropropene	15.16	75.0	274076M	244.48	NG	94
26)	Trichloroethene	15.68	130.0	137359M	262.00	NG	94
27)	Benzene	16.12	78.0	372266M	221.01	NG	100
28)	Dibromochloromethane	16.37	129.0	153837	243.04	NG	99
29)	trans-1,3-Dichloropropene	16.43	75.0	126412M	167.43	NG	93
30)	1,1,2-Trichloroethane	16.43	97.0	124435	273.00	NG	89
31)	Bromoform	19.01	172.8	105363	245.98	NG	99
32)	*Chlorobenzene-d5	23.45	117.0	296201M	250.00	NG	96
33)	4-Methyl-2-pentanone	18.38	43.0	86887M	124.15	NG	95
34)	2-Pentanone	20.71	43.0	50514F	114.38	NG	91
35)	Tetrachloroethene	21.22	164.0	107329	273.09	NG	97
36)	1,1,2,2-Tetrachloroethane	21.25	83.0	177155	240.40	NG	74
37)	Toluene-d8	22.24	98.0	417185	258.66	NG	100
38)	Toluene	22.45	92.0	254415	146.15	NG	95
39)	Chlorobenzene	23.58	112.0	312202	234.34	NG	98
40)	Ethylbenzene	25.32	106.0	147162	241.30	NG	96
41)	Bromofluorobenzene	27.34	95.0	200653M	236.41	NG	94
42)	Styrene	28.40	104.0	328551M	245.10	NG	94
43)	m-Xylene	28.61	106.0	214424M	253.41	NG	96

Compound	R.T.	Q Ion	Area	Conc	Units	q
44) Xylene (total)	29.33	106.0	176307M	242.49	NG	96

Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >V2314:402

Quant Output File: >V2314:401

Name: VSTD050

Misc: HP5987A DA/DC(1042.087.500)P1

In File: 10000:1ER

Title: CLP V04 ID FILE (PACKED COLUMN)

Last Calibration: 890417 12:35

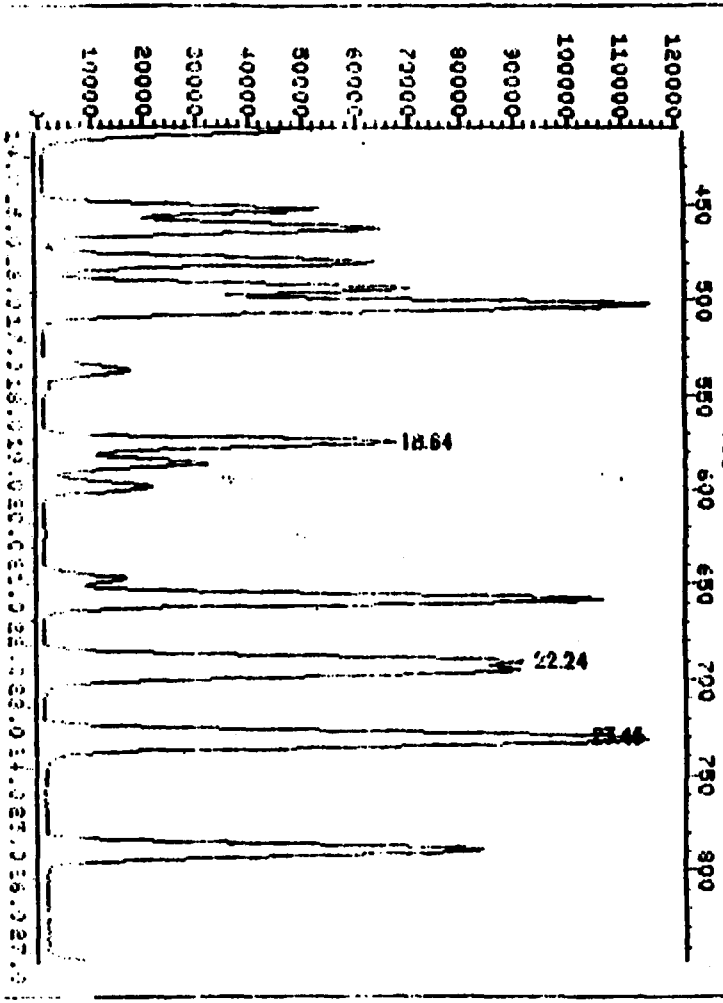
Operator ID: KAREN

Quant Time: 890417 12:37

Injected at: 890417 11:42

TIC page 1 of 3

TOTAL ION CHROMATOGRAM
File V2314 35.0-260.0 au. V515050 HP5987A DA/DEC1042.0
TIC



DATE FILED: 2003141402 Quant Output File: V23141101

Name: V515050

File: 885257A 5A100 1041097.500 01

In File: 10140011

File: 02104 ID FILE PACKED COLUMN

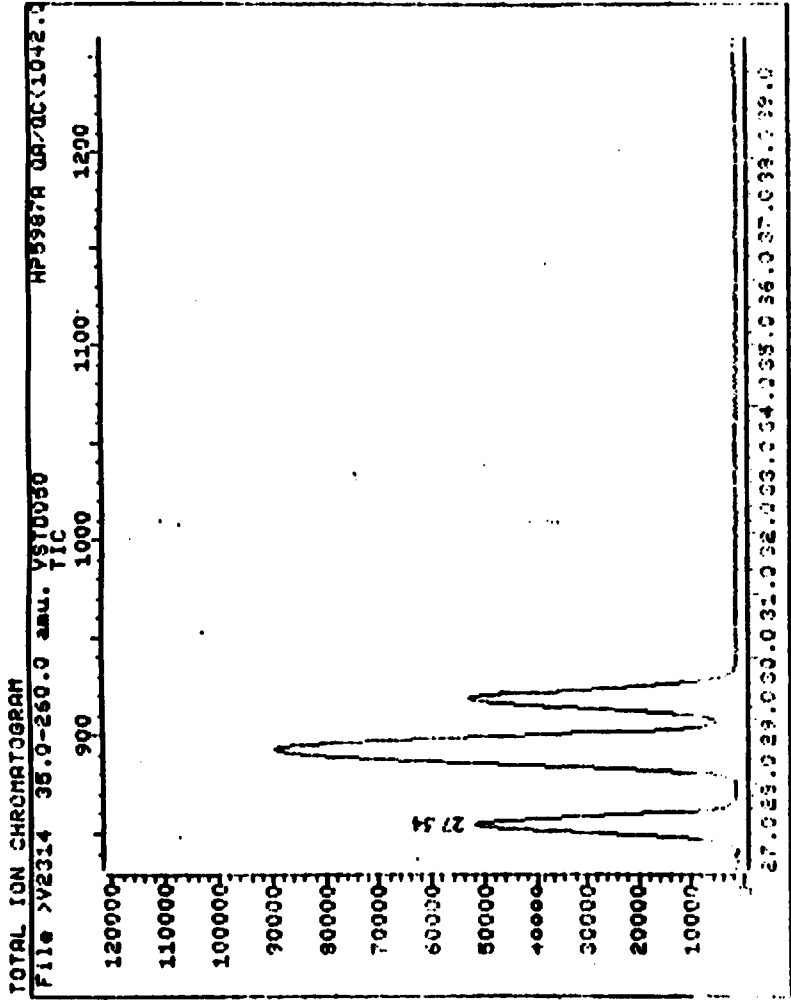
Last Calibration: 200417 10175

Operator ID: KAREN

Quant Time: 890417 12:37

Injected at: 890417 11:12

TIC Page 2 of 3



Data File: >V2314:02 Quanc Output File: >V2314:03

Name: >VST030

• User: >MS9374 DA/AC.10-2 027.300181

in File: >DUM018A

File: >V09 ID FILE (PACKED COLUMN)

Mass Collection: 890417 11:42

Operator ID: KAREN

Quant Time: 890417 12:37

Injected at: 890417 11:42

TIC page 3 of 3

QUANT REPORT

Operator ID: KAREN
 Output File: ^U2316::D1
 Data File: >U2316::D2
 Name: USTD100
 Misc: HP5987A QA/QC(1042.097.300)P1

Quant Rev: 6 Quant Time: 890417 14:52
 Injected at: 890417 13:56
 Dilution Factor: 1.00000

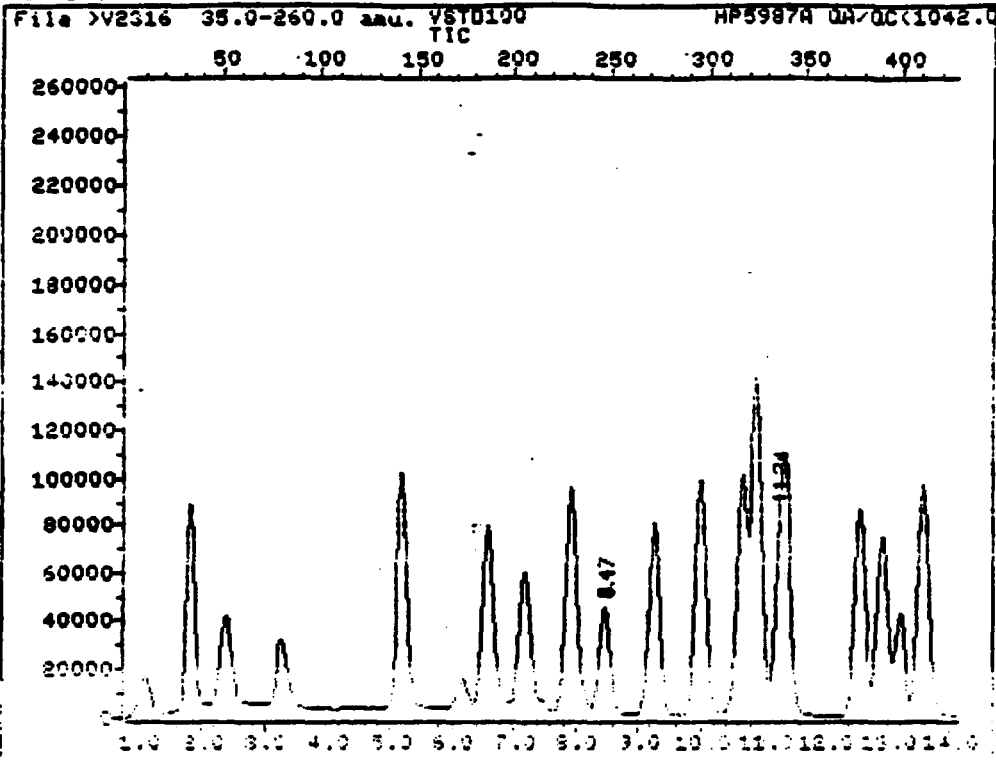
ID File: IDUML::EX
 Title: CLP UJA ID FILE (PACKED COLUMN)
 Last Calibration: 890417 12:35

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*Bromochloromethane	8.47	128.0	79582	250.00	NG	98
2)	Chloromethane	1.10	50.0	118538	232.07	NG	97
3)	Bromomethane	1.79	94.0	292568	1520.40	NG	91
4)	Vinyl Chloride	2.38	62.0	269102M	1099.67	NG	97
5)	Chloroethane	3.28	64.0	192226	623.21	NG	99
6)	Methylene Chloride	5.18	84.0	289244	730.46	NG	69
7)	Acetone	6.17	43.0	82506	521.86	NG	99
8)	Carbon Disulfide	6.58	76.0	712626M	964.23	NG	94
9)	Trichlorofluoromethane-Freon11	7.17	101.0	294222M	359.84	NG	95
10)	1,1-Dichloroethene	7.91	95.0	249231	512.94	NG	90
11)	1,1-Dichloroethane	9.26	63.0	492427	378.01	NG	98
12)	1,2-Dichloroethene (total)	9.99	94.0	275027	500.26	NG	70
13)	Chloroform	10.65	93.0	479228	436.64	NG	98
14)	1,1,2-Cl3F3-Ethane (Freon 113)	10.87	101.0	483047	529.48	NG	97
15)	1,2-Dichloroethane-d4	11.24	63.0	285349M	400.65	NG	98
16)	1,2-Dichloroethane	11.36	62.0	283695	405.63	NG	98
17)	2-Chloroethylvinylether	17.46	106.0	32331	479.57	NG	38
18)	1,4-Difluorobenzene	18.57	114.0	568950	250.00	NG	100
19)	2-Butanone	11.36	73.0	32351M	510.61	NG	95
20)	1,1,1-Trichloroethane	12.54	97.0	34467	405.60	NG	90
21)	Carbon Tetrachloride	12.92	117.0	265214M	391.60	NG	97
22)	Vinyl Acetate	13.20	43.0	342751M	301.34	NG	90
23)	Bromodichloromethane	13.57	83.0	414713	413.77	NG	99
24)	1,2-Dichloropropane	14.84	63.0	294195M	381.69	NG	90
25)	cis-1,3-Dichloropropene	15.12	75.0	589981M	496.89	NG	95
26)	Trichloroethene	15.59	130.0	299633	539.62	NG	90
27)	Benzene	16.12	78.0	816186	457.51	NG	100
28)	Dibromochloromethane	16.34	129.0	326681	487.29	NG	97
29)	trans-1,3-Dichloropropene	16.40	75.0	272827M	341.19	NG	92
30)	1,1,2-Trichloroethane	16.43	97.0	269276	557.79	NG	89
31)	Bromoform	18.98	172.8	228879	504.51	NG	99
32)	Chlorobenzene-d5	19.48	107.0	308753M	250.00	NG	90
33)	4-Methyl-2-pentanone	19.58	43.0	201317	176.55	NG	90
34)	2-Hexanone	20.51	43.0	157194M	171.90	NG	90
35)	Tetrachloroethene	21.22	164.0	232443	567.04	NG	96
36)	1,1,2,2-Tetrachloroethane	21.25	83.0	405715	527.86	NG	81
37)	Toluene-d8	22.24	98.0	865156	514.29	NG	100
38)	Toluene	22.43	92.0	563593	522.76	NG	78
39)	Chlorobenzene	23.59	112.0	670771	544.53	NG	90
40)	Ethylbenzene	25.32	106.0	323565	503.63	NG	93
41)	Bromofluorobenzene	27.34	93.0	430127	485.87	NG	86
42)	Styrene	28.40	104.0	709437M	507.75	NG	94
43)	m-Xylene	28.62	106.0	459532M	520.70	NG	98

Compound	R.T.	Q ion	Area	Conc	Units	q
44) Xylene (total)	29.33	106.0	376964M	497.09	NG	97

Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: V02316:02

Quant Output File: V02316:02

Name: V5TD100

Model: HP5987A QM/QC(1042.097.F00)F1

Id File: IDUMPL.TA

Title: QLP VQA ID FILE (PACKED COLUMN)

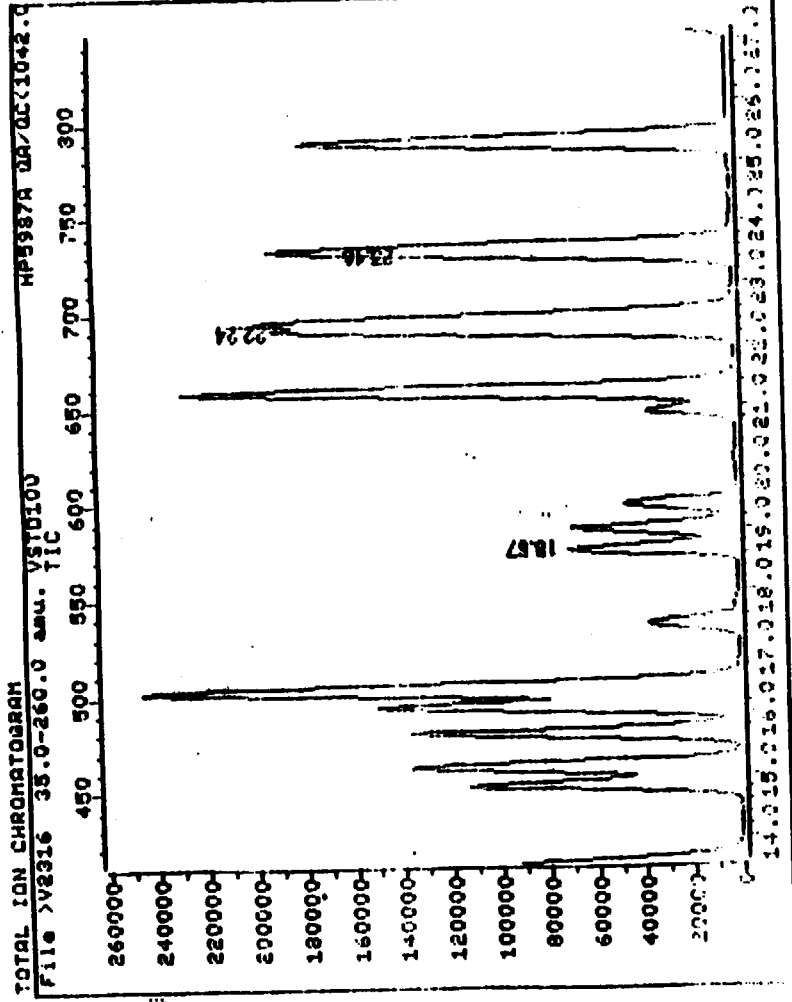
Last Calibration: 890417 11:55

Operator ID: KAREN

Quant Time: 890417 14:52

Injected at: 890417 13:56

TIC page 1 of 3



Data File: >U2316:02 Quant Output File: >U2316:01

Name: VSTD100

Misc: HP5987A DA/DC(1042.097.500)P1

ID FILE: IDVNL11EX

Title: CLP UOA ID FILE (PACKED COLUMN)

Last Calibration: 890417 12:35

Operator ID: KAREN

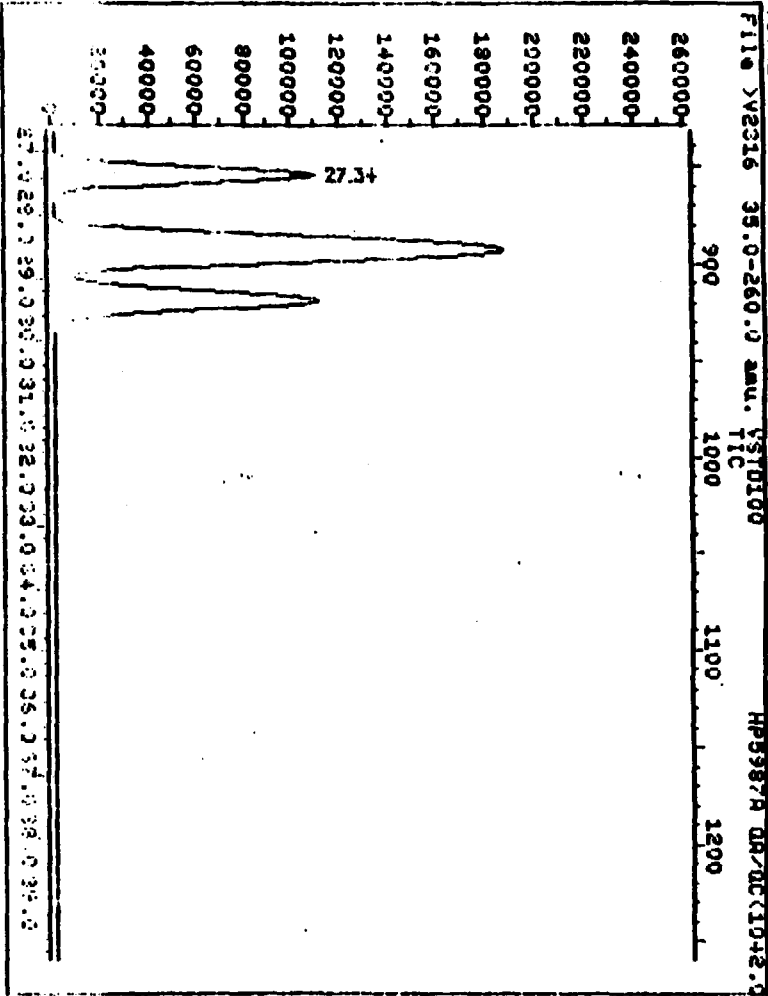
Quant Time: 890417 14:52

Injected at: 890417 13:56

TIC page 2 of 3

TOTAL ION CHROMATOGRAM

File: Y2316 35.0-260.0 amu. YSTD100 HP5987A DA/DC(10+2.0



Data File: Y2316:02

Quant Output File: Y2316:01

Name: YSTD100

Mass: HP5987A DA/DC(10+2.097.500)F1

ID File: FOUND:15

Title: QLP QON ID FILE (PACKED COLUMN)

Last Calibration: 390417 12:55

Operator ID: KAREN

Quant Time: 890417 14:52

Injected at: 890417 13:55

TIC page 3 of 3

QUANT REPORT

Operator ID: KAREN
 Output File: ^U2317::D1
 Data File: >U2317::D2
 Name: USTD150
 Misc: HP5987A QA/QC(1042.097.300)P1

Quant Rev: 6 Quant Time: 890417 15:54
 Injected at: 890417 14:51
 Dilution Factor: 1.00000

ID File: IDUML::EX
 Title: CLP UOA ID FILE (PACKED COLUMN)
 Last Calibration: 890417 12:35

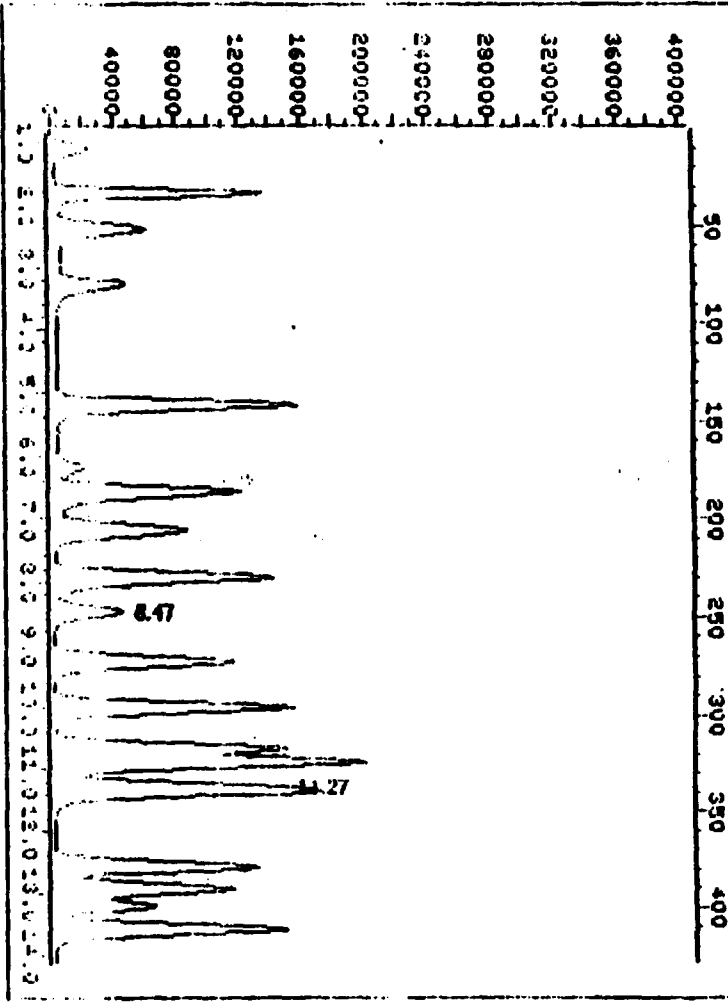
	Compound	R.T.	Q Ion	Area	Conc	Units	q
1)	*Bromochloromethane	8.47	128.0	81913	250.00	NG	99
2)	Chloromethane	1.10	50.0	173439M	329.88	NG	97
3)	Bromomethane	1.79	94.0	451500	2279.56	NG	88
4)	Vinyl Chloride	2.38	62.0	427552	1697.44	NG	99
5)	Chloroethane	3.25	64.0	291497M	918.16	NG	99
6)	Methylene Chloride	5.21	84.0	448239	1099.77	NG	74
7)	Acetone	6.17	43.0	126603M	777.99	NG	94
8)	Carbon Disulfide	6.58	76.0	1096123M	1440.93	NG	94
9)	Trichlorofluoromethane-Freon11	7.17	101.0	462175	549.17	NG	95
10)	1,1-Dichloroethane	7.91	96.0	379619	759.06	NG	97
11)	1,1-Dichloroethane	9.29	63.0	703392	570.97	NG	99
12)	1,2-Dichloroethane (total)	9.99	96.0	414501M	740.62	NG	91
13)	Chloroform	10.65	53.0	708172	637.33	NG	99
14)	1,1,2-C13F3-Ethane (Freon 113)	10.90	101.0	601305M	714.21	NG	95
15)	1,2-Dichloroethane-d4	11.27	65.0	389854	593.12	NG	94
16)	1,2-Dichloroethane	11.56	62.0	452438	614.66	NG	95
17)	2-Chloroethoxyethyl ether	17.46	106.0	51823	735.48	NG	99
18)	*1,4-Difluorobenzene	18.67	114.0	369971M	250.00	NG	100
19)	3-Butanone	11.39	72.0	53020M	927.96	NG	92
20)	1,1,1-Trichloroethane	12.57	97.0	503569	651.66	NG	94
21)	Carbon Tetrachloride	12.95	117.0	419909M	613.29	NG	97
22)	Vinyl Acetate	13.23	43.0	523086M	455.02	NG	91
23)	Bromodichloromethane	13.60	83.0	649438	341.10	NG	99
24)	1,2-Dichloropropane	14.94	63.0	461224M	592.05	NG	99
25)	cis-1,3-Dichloropropene	15.15	75.0	924619M	770.47	NG	94
26)	Trichloroethene	15.68	130.0	468983	835.65	NG	93
27)	Benzene	16.12	78.0	1264634	701.38	NG	100
28)	Dibromochloromethane	16.37	129.0	507143	748.46	NG	97
29)	trans-1,3-Dichloropropene	16.40	75.0	426831M	528.12	NG	93
30)	1,1,2-Trichloroethane	16.43	97.0	422780	866.48	NG	89
31)	Bromoform	18.98	172.8	365871	797.93	NG	98
32)	*Chlorobenzene-d5	17.48	117.0	324081	250.00	NG	99
33)	4-Methyl-2-pentanone	18.32	65.0	529648	428.52	NG	95
34)	2-Hexanone	20.91	43.0	275521	447.13	NG	97
35)	Tetrachloroethene	21.25	104.0	345236	800.87	NG	97
36)	1,1,2,2-Tetrachloroethane	21.28	83.0	652746	807.59	NG	91
37)	Toluene-d8	22.24	98.0	1344176	759.83	NG	100
38)	Toluene	22.43	92.0	832348	734.59	NG	99
39)	Chlorobenzene	23.53	110.0	1024915	791.18	NG	99
40)	Ethylbenzene	25.32	106.0	497153	743.24	NG	94
41)	Bromofluorobenzene	27.34	95.0	651953M	700.20	NG	87
42)	Styrene	28.40	104.0	1112361M	757.03	NG	92
43)	m-Xylene	28.62	106.0	718243M	773.90	NG	97

Compound	R.T.	Q	Ion	Area	Conc	Units	q
44) Xylene (total)	29.33	106.0		588285M	737.68	NG	99

Compound is ISTD

TOTAL ION CHROMATOGRAM

File: \V2317 36.0-260.0 amu. VSI.D153 HP59874 DA/JC(1082.0



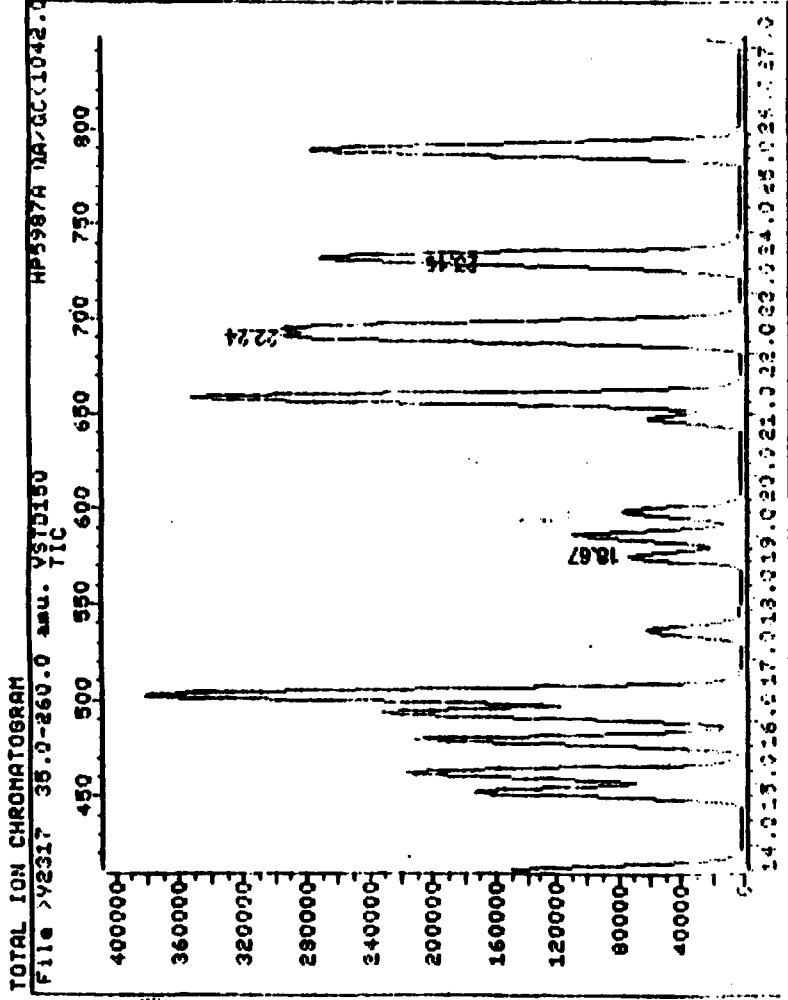
Data File: \V2317:101 Quant Output File: \V2317:101

Run Date: 08/20/90
Mass: 8559374 QP/V2317042.037.000001

GC: 59874 TOWER: 0X
Detector: FID ID: FID (990000 03/09/91)
Last Calibration: 8/11/90 11:55

Operator ID: KAREN
Quant Time: 890417 15:54
Injected at: 890417 14:51

TIC page 1 of 3



Data File: >92317:02 Quant Output File: >92317:01

Name: V915150

Mass: HP5987A DA7CC1042.097.5001PI

IC File: IONNL:152

Title: CLP 004 IC FILE (PACKED COLUMN)

Last Calibration: 890417 12:35

Operator ID: KAREN

Quant Time: 890417 15:54

Injected at: 890417 14:51

TIC page 2 of 3

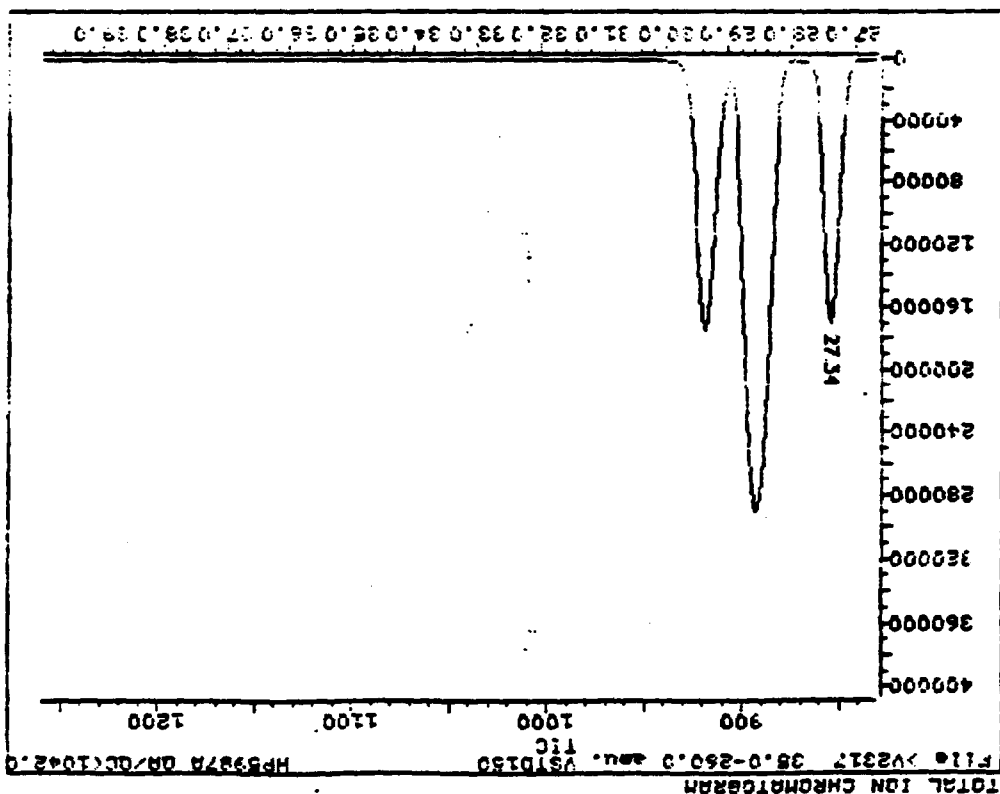
TIC Page 3 of 3

Operator ID: KAREN
Quant Time: 090417 15:54
Injected at: 090417 14:51

File: 027408.D (PACKED COLUMN)
Last Calibration: 090417 11:55

Method: HP5987A.DM/DIC1042.097.500951

Data File: 0273171.D2
Name: 0570150
Quant Output File: 0273171.D1



QUANT REPORT

Operator ID: KAREN
 Output File: >U2318:01
 Data File: >U2318:02
 Name: USTD200
 Misc: HP5987A QA/QC(1042.097.300)P1

Quant Rev: 6 Quant Time: 890417 10:29
 Injected at: 890417 15:41
 Dilution Factor: 1.00000

ID File: IDUML:EX
 Title: CLP UOA ID FILE (PACKED COLUMN)
 Last Calibration: 890417 12:35

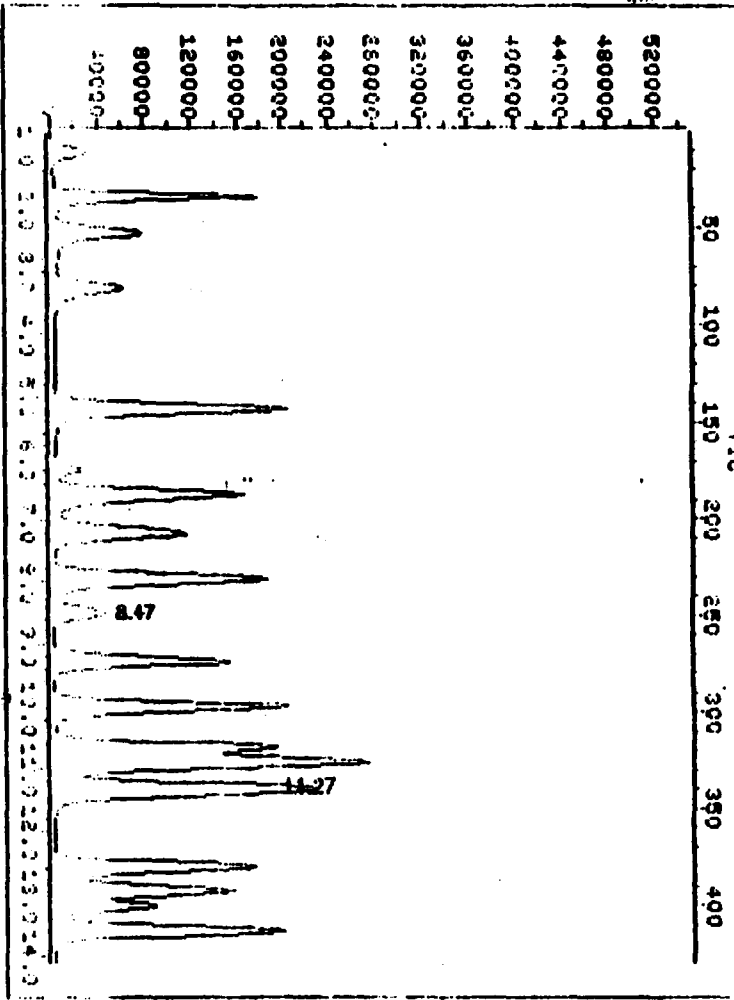
	Compound	R.T.	Q Ion	Area	Conc	Units	g
1)	*Bromochloromethane	8.47	128.0	81869	250.00	NG	99
2)	Chloromethane	1.10	50.0	223676	425.66	NG	98
3)	Bromomethane	1.82	94.0	582732M	2943.72	NG	87
4)	Vinyl Chloride	2.38	62.0	562734	2235.33	NG	99
5)	Chloroethane	3.28	64.0	397240	1251.90	NG	98
6)	Methylene Chloride	5.21	84.0	587762	1442.87	NG	76
7)	Acetone	6.17	43.0	166803	1025.57	NG	96
8)	Carbon Disulfide	6.58	76.0	1472901M	1937.27	NG	94
9)	Trichlorofluoromethane-Freon11	7.23	101.0	624352	742.27	NG	96
10)	1,1-Dichloroethene	7.94	95.0	506352	1013.01	NG	99
11)	1,1-Dichloroethane	9.28	65.0	919381	746.71	NG	98
12)	1,2-Dichloroethane (total)	9.99	96.0	563965	1006.88	NG	99
13)	Chloroform	10.65	85.0	948667	940.82	NG	99
14)	1,1,2-Cl3F3-Ethane (Freon 113)	10.90	101.0	853244	1014.01	NG	96
15)	1,2-Dichloroethane-d4	11.27	65.0	519672	789.52	NG	95
16)	1,2-Dichloroethane	11.36	62.0	503413	820.17	NG	95
17)	2-Chloroethylvinylether	17.46	106.0	71309	1012.51	NG	98
18)	1,4-Difluorobenzene	18.67	114.0	581224M	250.00	NG	100
19)	2-Butanone	11.39	72.0	60470M	1057.39	NG	93
20)	1,1,1-Trichloroethane	12.58	97.0	535726	852.30	NG	99
21)	Carbon Tetrachloride	12.95	117.0	552476M	785.06	NG	97
22)	Vinyl Acetate	13.23	43.0	710885	599.96	NG	90
23)	Bromodichloromethane	13.60	83.0	871774	834.95	NG	99
24)	1,2-Dichloropropane	14.98	63.0	612454M	762.76	NG	99
25)	cis-1,3-Dichloropropene	15.16	75.0	1222285M	993.03	NG	95
26)	Trichloroethene	15.68	150.0	509492	1053.67	NG	96
27)	Benzene	16.12	78.0	1621593M	872.56	NG	100
28)	Dibromochloromethane	16.37	129.0	682894	977.82	NG	97
29)	trans-1,3-Dichloropropene	16.43	75.0	576509M	692.08	NG	94
30)	1,1,2-Trichloroethane	16.46	97.0	561607	1116.73	NG	90
31)	Bromoform	19.01	172.8	490295	1037.44	NG	99
32)	*Chlorobenzene-d5	23.46	117.0	323580	250.00	NG	99
33)	4-Methyl-2-pentanone	19.39	45.0	447127	336.41	NG	99
34)	2-Hexanone	20.91	43.0	567056M	605.30	NG	96
35)	Tetrachloroethene	21.25	164.0	467557	1089.76	NG	96
36)	1,1,2,2-Tetrachloroethane	21.28	83.0	895129	1112.71	NG	92
37)	Toluene-d8	22.25	98.0	1808808	1027.31	NG	100
38)	Toluene	22.43	92.0	1100418M	235.18	NG	99
39)	Chlorobenzene	23.58	112.0	1358597	1053.73	NG	99
40)	Ethylbenzene	25.35	106.0	654970	983.79	NG	94
41)	Bromofluorobenzene	27.34	95.0	863230M	933.80	NG	84
42)	Styrene	29.40	104.0	1503606M	1028.14	NG	94
43)	m-Xylene	28.62	106.0	980744M	1061.75	NG	93

Compound	R.T.	Q ion	Area	Conc	Units	q
44) Xylene (total)	29.37	106.0	803225M	1018.27	NG	92

Compound is ISTD

TOTAL ION CHROMATOGRAM

File: 202318 35.0-250.0 AMU. 05/10/2000 HP8587A 08/00.10+2.0



Date Filed: 202310:10Z

Quanta Output File: 02315:10Z

Name: 0010000

Class: HP8587A 08/00.10+2.0 007 500 (P)

Event: 21 10000000

Column: 023 008 10 5115 (PACKED COLUMN)

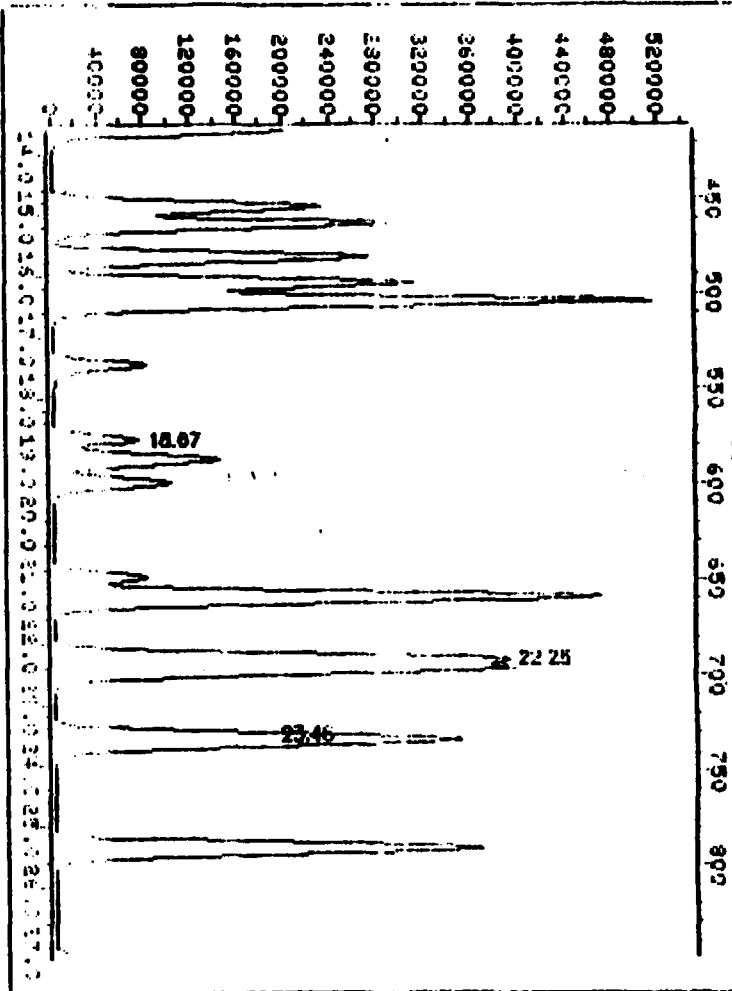
Cell: Calibration: 890417 12:15

Operator: JO: KAREN

Quant Time: 890417 16:129

Injected at: 890417 15:141

TIC page 1 of 5



Data File: 0025131102 QUANT OUTPUT FILE: 0025131101

Name: 0570206

Met: 08/08/79 20/0011042.097 500.00

INJECTION COMMENTS:

INJECTOR: 002 VOA ID F102 (PACKED COLUMN)

LEAK CALIBRATION: 390417 12.055

Operator ID: KAREN

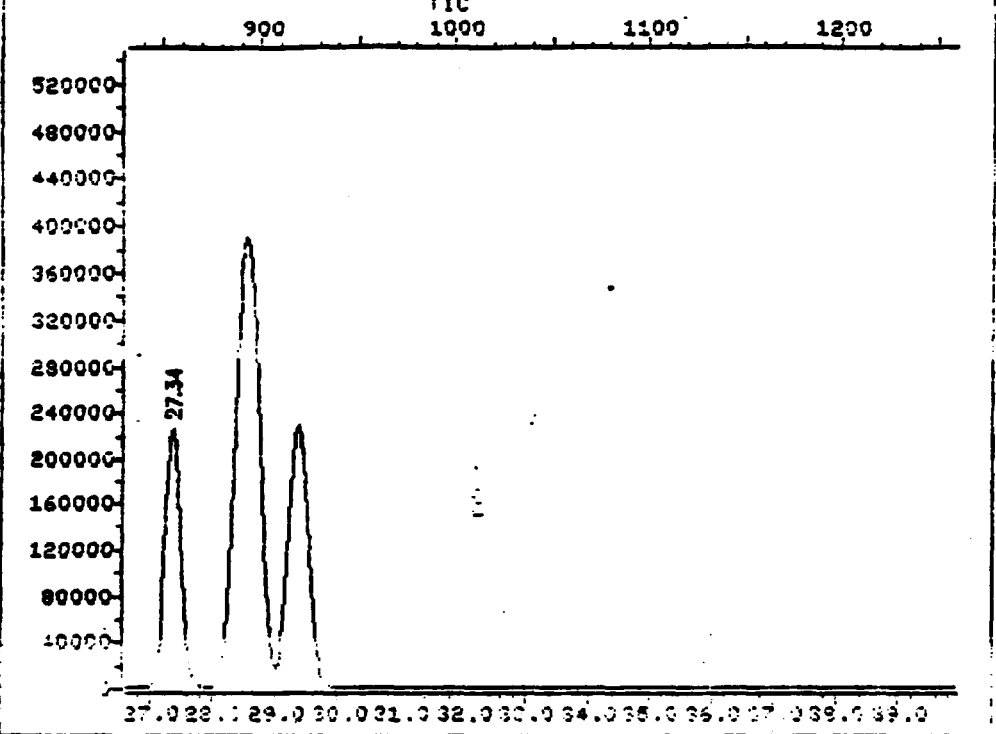
Quant Time: 890417 16:29

Injected at: 890417 15:11

TIC page 2 of 3

TOTAL ION CHROMATOGRAM

File X0318 35.0-260.0 amu. V970200 HP5987A QAPACK1042.0



Data File: 00318:02

Quant Output File: 00318:01

Name: V970200

Mass: HP5987A QAPACK1042.097.300181

SI File: 0041042

Title: OLP VOA IS FILE (PACKED COLUMN)

Last Calibration: 890417 11:58

Operator ID: KAREN

Quant Time: 890417 10:29

Injected at: 890417 15:41

TIC page 3 of 3

Continuing Calibration Check
MSL Compounds

Case No: _____ Calibration Date: 04/18/89
 Contractor: ORG Laboratories, Inc Time: 09:19
 Contract No: _____ Laboratory ID: 007320
 Instrument ID: HP 5987A Initial Calibration Date: 04/18/89

Minimum RF for SPC is 0.300 Maximum % Diff for CCC is 25.0%

Compound	RF	RF	%Diff	CCC	SPC
Chloromethane	.68402	.65639	4.04	**	
Bromomethane	1.81189	1.61749	10.73		
Vinyl Chloride	1.71685	1.57312	8.37	*	
Chloroethane	1.20915	1.05836	12.47		
Methylene Chloride	1.84345	1.67283	9.26		
Acetone	.54322	.52734	2.92		
Carbon Disulfide	4.51414	4.16921	10.30		
Trichlorofluoromethane-Freon11	1.94483	1.91995	1.29		
1,1-Dichloroethane	1.56064	1.43134	8.78	*	
1,2-Dichloroethane	2.81445	2.48952	7.95	**	
1,2-Dichloroethane (Total)	1.78169	1.56189	8.26		
1,1,1-Trichloroethane (Freon 113)	2.94741	2.75123	7.09	*	
1,1,1-Trichloroethane (Freon 113)	1.59977	1.54101	2.26		(Conc=247.50)
1,2-Dichloroethane-14	1.60541	1.52234	4.86		
1,2-Dichloroethane	1.85985	1.78989	8.04		
2-Chloroethoxyvinylether	.70518	.68789	8.82		
2-Butanone	.84798	.84418	7.92		
1,1,1-Trichloroethane	.48885	.44763	6.75		
Carbon Tetrachloride	.37389	.34599	7.46		
Vinyl Acetate	.46689	.40884	14.10		
Bromodichloromethane	.58644	.55021	6.18		
1,2-Dichloropropane	.41361	.38844	8.01	*	
cis-1,3-Dichloropropene	.68432	.62749	8.38		(Conc=300.00)
Trichloroethane	.41425	.37648	9.07		
Benzene	1.12050	1.03975	7.21		
Dibromochloromethane	.45447	.42466	6.56		
trans-1,3-Dichloropropene	.47359	.44871	5.25		(Conc=200.00)
1,1,1-Trichloroethane	.52884	.50084	7.41		
Hexanone	.32242	.29844	7.41	**	
4-Methyl-2-pentanone	.33441	.29949	12.41		
2-Hexanone	.26856	.22949	14.55		
Tetrachloroethane	.36671	.33600	8.35		

RF - Response Factor from daily standard file at 250.00 NG

RF - Average Response Factor from Initial Calibration File U:

%Diff - % Difference from original average of curve

CCC - Calibration Check Compounds (*) SPC - System Performance Check Compounds (**)

Continuing Calibration Check
MSL Compounds

Case No: _____ Calibration Date: 04/18/89
 Contractor: DRG Laboratories, Inc Time: 09:19
 Contract No: _____ Laboratory ID: 102328
 Instrument ID: HP 5987R Initial Calibration Date: 04/18/89

Minimum RF for SPCC is 0.300 Maximum % Diff for CCC is 25.0%

Compound	RF	RF	%Diff	CCC	SPCC
1,1,2,2-Tetrachloroethane	.66828	.59977	10.25	**	
Toluene-d8	1.48964	1.34687	4.51		
Toluene	.88157	.84939	3.65	*	
Chlorobenzene	1.87217	1.82733	4.18	**	
Ethylbenzene	.51736	.47814	7.58	*	
Bromofluorobenzene	.68694	.63780	7.15		
Styrene	1.14388	1.08669	6.57		
m-Xylene	.75249	.70428	6.41		(Conc=251.00)
Xylene (total)	.61715	.56270	8.01		

RF - Response Factor from daily standard file at 250.00 ug

RF - Average Response Factor from Initial Calibration Form UI

%Diff - % Difference from original average of curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Operator ID: KAREN
 Output File: >U2320:*D1
 Data File: >U2320:*D2
 Name: USTD050
 Misc: HP5987A QA/QC(1042.097.300)P1

Quant Rev: 6 Quant Time: 890418 10:15
 Injected at: 890418 09:19
 Dilution Factor: 1.00000

ID File: IOUML:*EX
 Title: CLP VOA ID FILE (PACKED COLUMN)
 Last Calibration: 690418 08:42

	Compound	R.T.	Q ion	Area	Conc	Units	g
1)	*Bromochloromethane	8.47	128.0	91449M	250.00	NG	99
2)	Chloromethane	1.07	50.0	53462M	239.90	NG	95
3)	Bromomethane	1.79	94.0	131743M	223.18	NG	92
4)	Vinyl Chloride	2.35	62.0	128129	229.07	NG	97
5)	Chloroethane	3.25	64.0	86202M	218.82	NG	99
6)	Methylene Chloride	5.18	84.0	136250M	226.86	NG	72
7)	Acetone	6.14	43.0	42951M	242.69	NG	99
8)	Carbon Disulfide	6.58	76.0	329804M	224.25	NG	95
9)	Trichlorofluoromethane-Freon11	7.20	101.0	156378	246.27	NG	97
10)	1,1-Dichloroethane	7.91	96.0	116583	229.29	NG	95
11)	1,1-Dichloroethane	9.25	63.0	212543	231.63	NG	97
12)	1,2-Dichloroethane (total)	10.00	95.0	127149M	219.54	NG	75
13)	Chloroform	10.61	83.0	224085	231.79	NG	96
14)	1,1,2-D15F3-Ethane (Freon 113)	10.87	101.0	104893	241.21	NG	97
15)	1,2-Dichloroethane-d4	11.27	63.0	124402	237.89	NG	87
16)	1,2-Dichloroethane	11.34	61.0	132269M	229.64	NG	95
17)	2-Chloroethylvinylether	12.42	105.0	13253	217.95	NG	88
18)	*1,4-Difluorobenzene	13.34	114.0	373209	259.09	NG	100
19)	2-Butanone	11.31	72.0	11487	259.21	NG	96
20)	1,1,1-Trichloroethane	12.58	97.0	147064	233.11	NG	97
21)	Carbon Tetrachloride	12.71	117.0	119131M	251.34	NG	95
22)	Vinyl Acetate	13.20	43.0	149603	215.00	NG	91
23)	Bromodichloromethane	13.57	83.0	205350	234.55	NG	99
24)	1,2-Dichloropropane	14.84	63.0	141993M	229.96	NG	99
25)	cis-1,3-Dichloropropane	15.12	75.0	231030M	275.09	NG	95
26)	Trichloroethene	15.68	130.0	140564	217.37	NG	96
27)	Benzene	15.12	78.0	338055	251.99	NG	100
28)	Dibromochloromethane	16.37	129.0	158491	233.60	NG	99
29)	trans-1,3-Dichloropropene	16.40	75.0	133973	189.49	NG	94
30)	1,1,2-Trichloroethane	16.43	97.0	130641	231.48	NG	93
31)	Bromoform	16.78	172.8	111391	251.42	NG	99
32)	*Chlorobenzene-d5	23.45	117.0	323725M	250.00	NG	97
33)	4-Methyl-2-pentanone	18.58	63.0	94528M	217.99	NG	81
34)	2-Hexanone	19.71	47.0	74297M	215.61	NG	86
35)	Tetrachloroethene	17.11	117.0	108797	219.11	NG	97
36)	1,1,2,2-Tetrachloroethane	21.23	63.0	194162	224.57	NG	81
37)	Toluene-d8	22.24	98.0	435755	238.72	NG	100
38)	Toluene	22.43	92.0	274968	240.87	NG	93
39)	Chlorobenzene	23.55	112.0	332573	239.54	NG	98
40)	Ethylbenzene	25.32	106.0	154737	251.65	NG	93
41)	Bromofluorobenzene	27.54	95.0	106470M	252.62	NG	87
42)	Styrene	29.40	104.0	351790M	233.59	NG	91
43)	m-Xylene	28.61	106.0	228906M	234.92	NG	93

Compound	RT	Q	Ion	Area	Conc	Units	
44) Xylene (total)	29.33	106.0		183778M	229.97	NG	96

Compound is ISTD

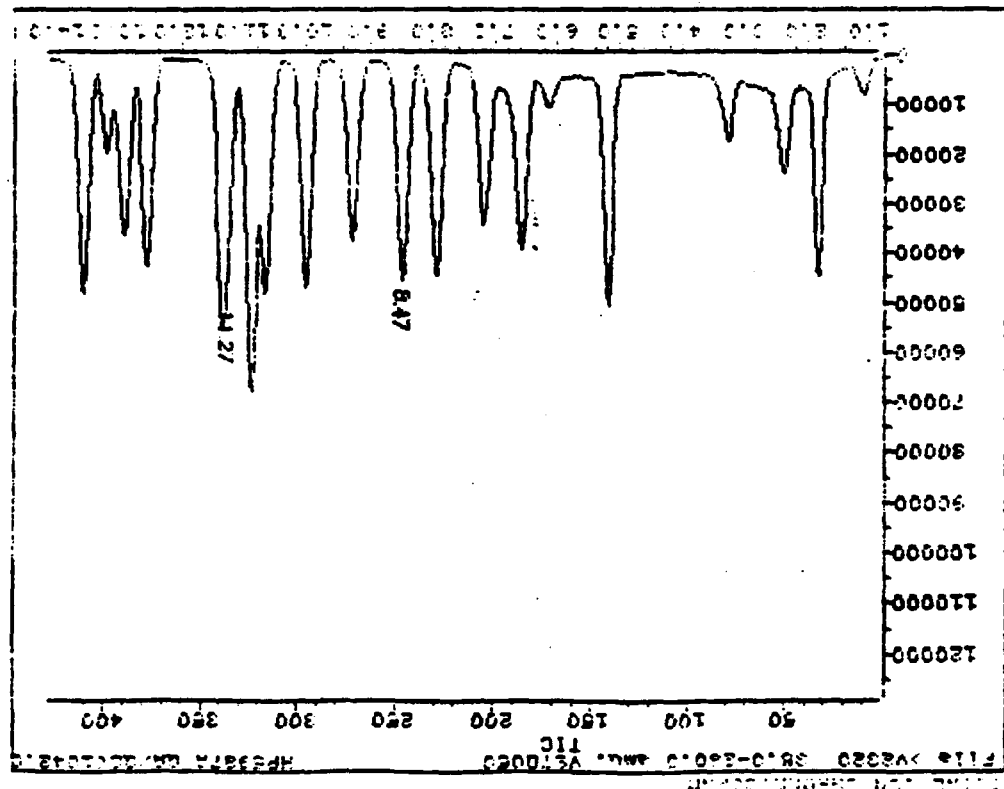
Page 1 of 2

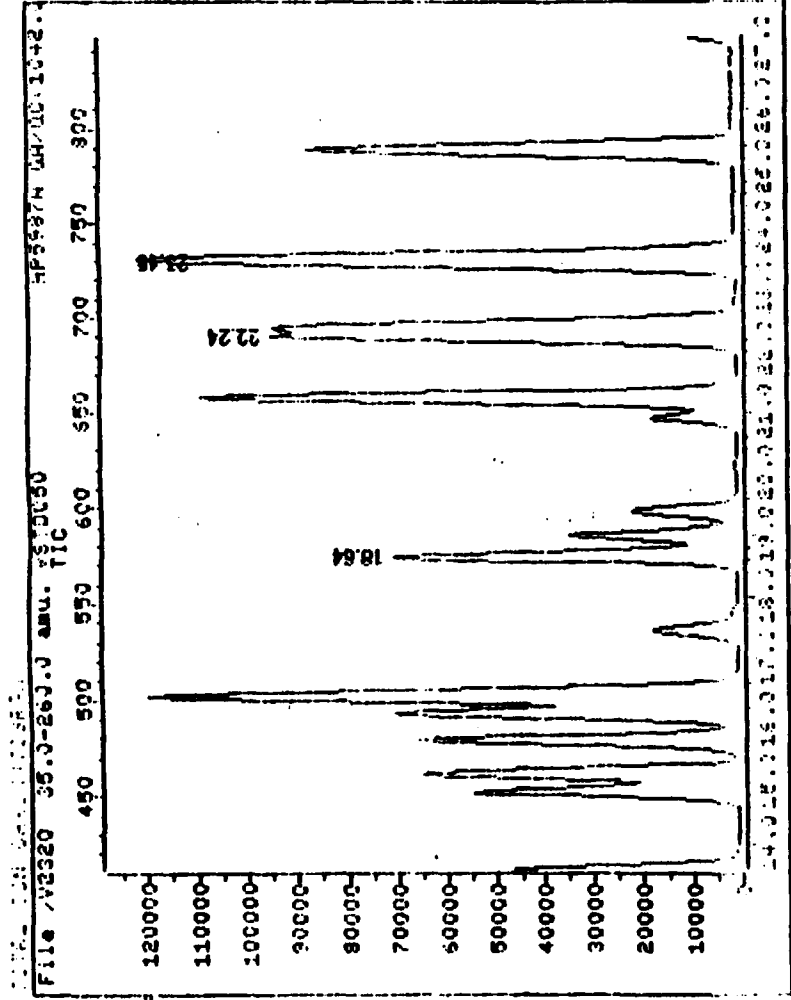
Operator: JOE KAREN
Start Time: 890418 10:15
Injctd at: 890418 09:19

Peak at 1.042: 850418 08:43
Peak at 1.042: 850418 08:43
Peak at 1.042: 850418 08:43

File Name: 890418 10:15
Data File: 890418 10:15
Sample Name: 890418 10:15

Quant Output File: 890418 10:15





Data File: 202310102 Quant Output File: 202320101

Name: 0310420

Misc: HP5887H 66790(1042.097.300)01

17 Name: 100PL1150

File: C:\MSD\10 FILE 1240150 COL.MN

Last Calibration: 890410 08:41

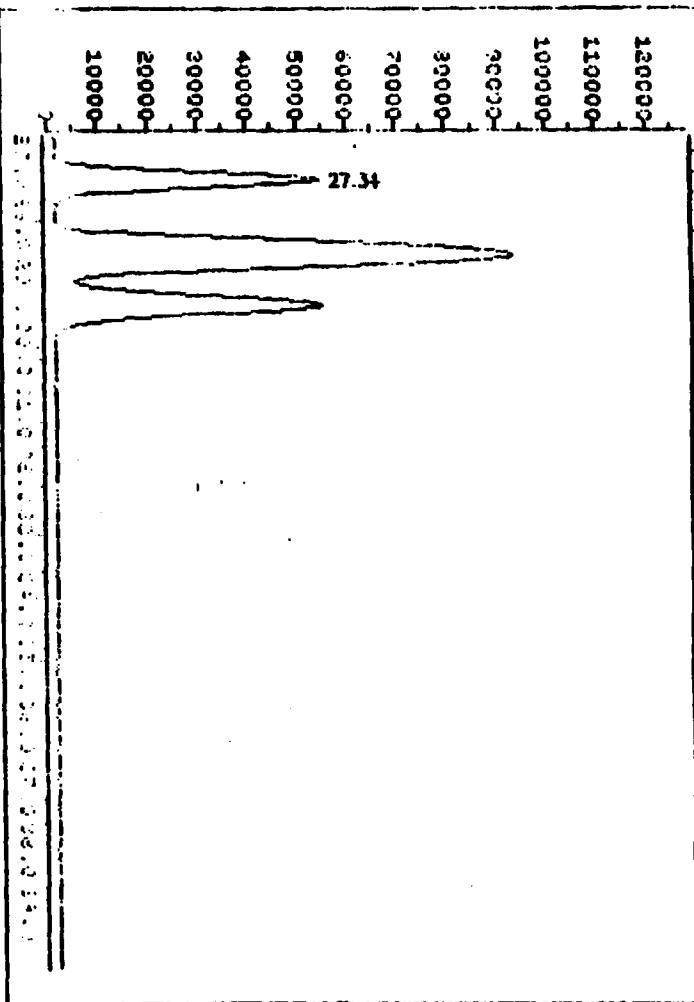
Operator ID: KASEN

Quant Time: 890418 10:15

Injected at: 890418 07:19

TIC page 2 of 2

FILE 072320 2610-001.0 AMU. TIC HP5890A JUN 03 1970



Data File: 007220:101 Start Output File: 007220:101

Name: 007220

File: 007220

User: J. J. J.

Operator: J. J. J.

Quant Time: 090413 10:15

Injectad at: 090413 09:19

File: 007220

Continuing Calibration Check
HSL Compounds

Case No: _____ Calibration Date: 04/19/89

Contractor: 086 Laboratory, Inc Time: 09:28

Contract No: _____ Laboratory ID: 202398

Instrument ID: HP 5987A Initial Calibration Date: 04/18/89

Minimum RF for SPC: is 0.368 Maximum % Diff for DIC is 25.0%

Compound	RF	RF	%Diff	DIC SPC
Chloromethane	.68402	.76673	12.09	**
Bromomethane	1.91189	1.64914	8.98	
Vinyl Chloride	1.71685	1.59228	7.26	*
Chloroethane	1.20915	1.05594	12.62	
Methylene Chloride	1.84345	1.67749	11.99	
Acetone	.54377	.47743	13.03	*
Carbon Disulfide	4.51414	3.97438	11.91	
Trichloroethylene-Freon11	1.44915	1.72337	17.58	
1,1-Dichloroethane	1.56064	1.42678	8.58	*
1,1-Dichloroethane	2.81445	2.58841	8.11	**
1,1-Dichloroethane (total)	1.78149	1.57079	10.18	
1,1,1-Trichloroethane	2.26241	2.72439	8.19	*
1,1,1,1-Tetrafluoroethane (Freon 113)	9.59077	9.43549	2.01	(Conc=37.511)
1,2-Dichloroethane-4d	1.40541	1.47734	7.97	
1,2-Dichloroethane	1.46985	1.45694	18.91	
2-Nitroethylvinyl ether	.73938	.78517	9.75	
2-Butene	.34798	.44078	15.16	
1,1,1-Trichloroethane	.481175	.42042	12.38	
Carbon Tetrachloride	.37389	.39555	12.93	
Diethyl Acetate	.44617	.37982	18.68	
Bromodichloromethane	.58644	.52752	10.05	
2-Urchloropropane	.41361	.37682	8.89	*
1,2-1,3-Dichloropropane	.68432	.58938	13.88	(Conc=388.88)
Trichloroethane	.41425	.34647	11.53	
Benzene	1.12050	.99410	11.28	
1,1-Dibromochloroethane	.65447	.39697	12.21	(Conc=708.88)
trans-1,2-Dichloropropane	.47559	.40758	13.94	
1,1,2-Trichloroethane	.37334	.47324	11.71	
Freon113	.37227	.47217	14.84	**
1,2-Dibromoethane	.31441	.28387	15.35	
2-Methoxene	.26856	.22962	14.58	
Tetrachloroethane	.36671	.37768	7.94	

RF - Response Factor from daily standard file at 150.00 Mc

%Diff - Average Response Factor from Initial Calibration Form UI

DIC - % Difference from original average of curves

CF - Calibration Check Compounds (*) SPC - System Performance Check Compounds (**)

Continuing Calibration Check
MSL Compounds

Case No: _____ Calibration Date: 04/19/89
 Contractor: OHS Laboratories, Inc. Time: 09:20
 Contract No: _____ Laboratory ID: 002328
 Instrument ID: HP 5987A Initial Calibration Date: 04/18/89

Minimum RF for SPCC is 0.300 Maximum % Diff for CCC is 25.0%

Compound	\bar{RF}	RF	%Diff	CCC	SPCC
1,1,2,2-Tetrachloroethane	.66828	.58969	11.76	**	
Toluene-d8	1.40964	1.29805	7.92		
Toluene	.88157	.80879	9.16	*	
Chlorobenzene	1.07217	.98347	8.27	**	
Ethylbenzene	.51776	.47338	8.50	*	
MonoFluorobenzene	.68694	.63139	8.19		
Styrene	1.34338	1.06219	8.67		
m-Xylene	.75749	.69158	8.11		(Conc=251.00)
Xylene (total)	.61715	.56477	8.49		

- RF - Response Factor from daily standard file at 250.00 NG
 \bar{RF} - Average Response Factor from Initial Calibration Form UI
 %Diff - % Difference from original average or curve
 CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Operator ID: KAREN
 Output File: \V2328:01
 Data File: >V2328:02

Quant Reus: 3 Quant Time: 890419 10:16
 Injected as: 890419 09:23
 Dilution Factor: 1.00000

Name: USTD050
 Misc: HP5987A QA/QC(1042.097.300)P1

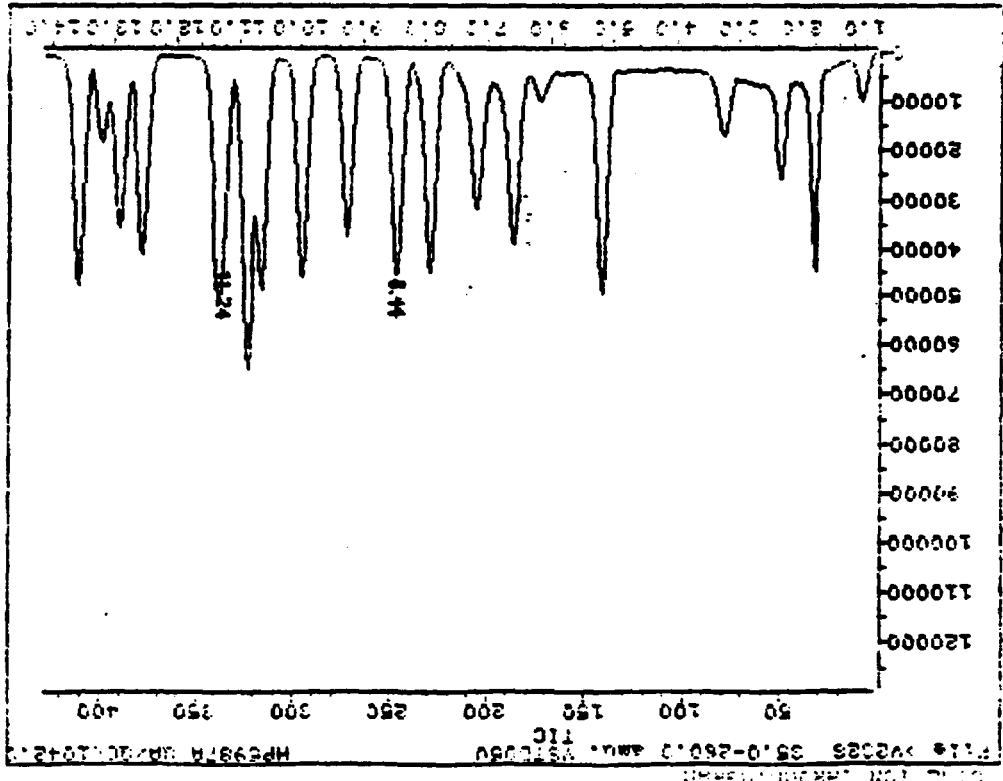
ID File: 10UML:EX
 Title: CLP UGA ID FILE (PACKED COLUMN)
 Last Calibration: 890419 10:17

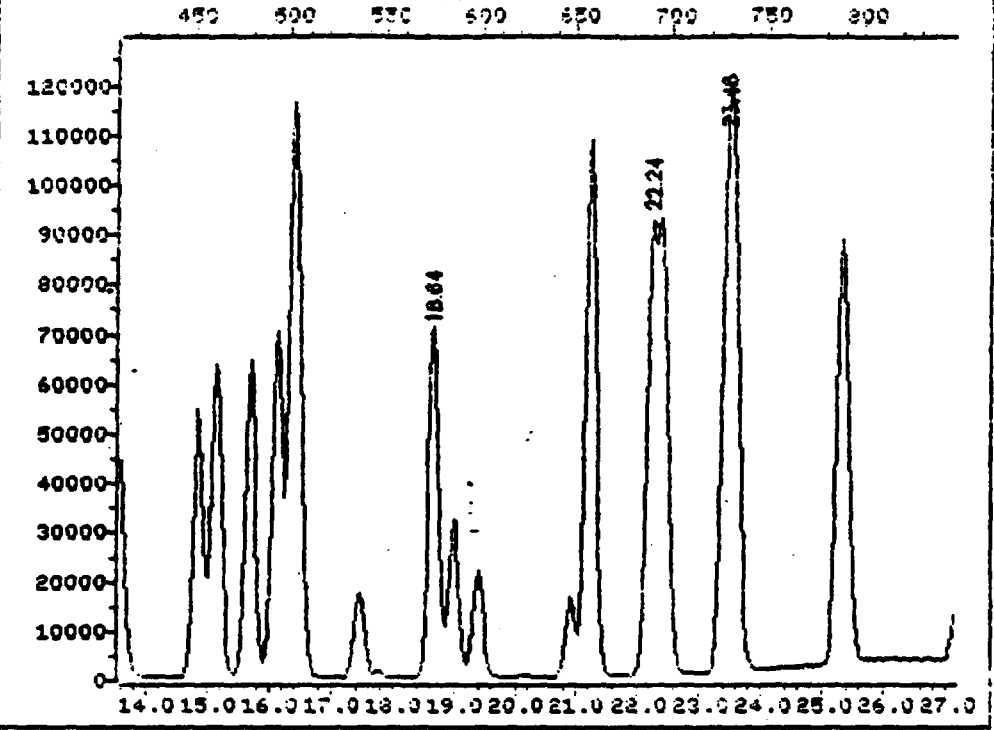
	Compound	R.T.	Q ion	Area	Conc	Units	g
1)	*Bromochloromethane	8.44	129.0	81442	250.00	NG	95
2)	Chloromethane	1.04	50.0	62444M	280.23	NG	97
3)	Bromomethane	1.79	94.0	134309	227.54	NG	93
4)	Vinyl Chloride	2.35	62.0	129672	231.85	NG	97
5)	Chloroethane	3.25	64.0	85998	218.32	NG	99
6)	Methylene Chloride	5.18	84.0	132139M	220.03	NG	75
7)	Acetone	6.14	43.0	38476	217.42	NG	97
8)	Carbon Disulfide	6.58	76.0	323844M	220.22	NG	95
9)	Trichlorofluoromethane-Freon11	7.17	101.0	140351M	221.05	NG	98
10)	1,1-Dichloroethene	7.92	96.0	116193	228.54	NG	91
11)	1,1-Dichloroethane	9.23	63.0	210905	229.75	NG	94
12)	1,2-Dichloroethene (total)	9.97	96.0	124589M	224.75	NG	84
13)	Chloroform	10.52	33.0	321890M	229.55	NG	99
14)	1,1,2-Cl3F5-Ethane (Freon 113)	10.87	101.0	194763	229.97	NG	96
15)	1,2-Dichloroethane-d4	11.24	65.0	120326	230.07	NG	95
16)	1,2-Dichloroethane	11.37	62.0	134946	222.75	NG	95
17)	2-Chloroethoxyethyl ether	17.43	106.0	15031	225.52	NG	89
18)	*1,4-Difluorobenzene	18.34	114.0	361913	250.00	NG	100
19)	2-Butanone	18.57	72.0	15348	222.19	NG	95
20)	1,1,1-Trichloroethane	18.55	77.0	160641	219.65	NG	94
21)	Carbon Tetrachloride	12.92	117.0	124737M	227.68	NG	97
22)	Vinyl Acetate	13.20	43.0	144751M	203.30	NG	37
23)	Bromodichloromethane	13.57	83.0	201468	224.87	NG	98
24)	1,2-Dichloropropane	14.35	63.0	143914M	227.77	NG	99
25)	cis-1,3-Dichloropropene	15.15	75.0	270075M	258.35	NG	95
26)	Trichloroethene	15.59	130.0	139961M	221.17	NG	91
27)	Benzene	16.12	78.0	379659	221.80	NG	100
28)	Dibromochloromethane	16.37	129.0	152371	219.47	NG	99
29)	trans-1,3-Dichloropropene	16.43	75.0	124504M	172.09	NG	92
30)	1,1,2-Trichloroethane	16.43	97.0	127466	220.72	NG	91
31)	Bromoform	18.98	172.8	105848	214.90	NG	99
32)	*Chlorobenzene-d5	23.46	117.0	324379	250.00	NG	97
33)	2-ethyl-2-butanone	19.53	43.0	91025M	211.52	NG	91
34)	2-hexanone	19.51	43.0	72484M	215.75	NG	91
35)	Tetrachloroethene	21.12	164.0	109510	230.15	NG	91
36)	1,1,2,2-Tetrachloroethane	21.25	83.0	191282	220.60	NG	82
37)	Toluene-d8	22.24	98.0	421060	230.21	NG	100
38)	Toluene	22.43	92.0	259761	227.09	NG	94
39)	Chlorobenzene	23.55	112.0	319015	229.32	NG	94
40)	Ethylbenzene	25.32	106.0	153553	228.75	NG	97
41)	Bromofluorobenzene	27.35	95.0	204810	219.78	NG	95
42)	Styrene	28.37	104.0	344553M	228.31	NG	93
43)	m-Xylene	28.59	106.0	225205M	230.65	NG	95

Compound	R.T.	Q	Ion	Area	Conc	Units	
44: Xylene (total)	29.31	106.0		183198M	228.78	NG	92

Compound is ISTD

TIC PAGE 1 OF 3
 Operator ID: KAREN
 Quant Time: 890419 10:18
 Injected at: 890419 09:28
 ID File: TOWNE-18X
 Last Calibration: 890419 10:17
 Name: U5TD050
 Misc: HPS879 8A79C11042.097.5001P1
 Data File: VU328:02
 Quant Output File: VU328:01



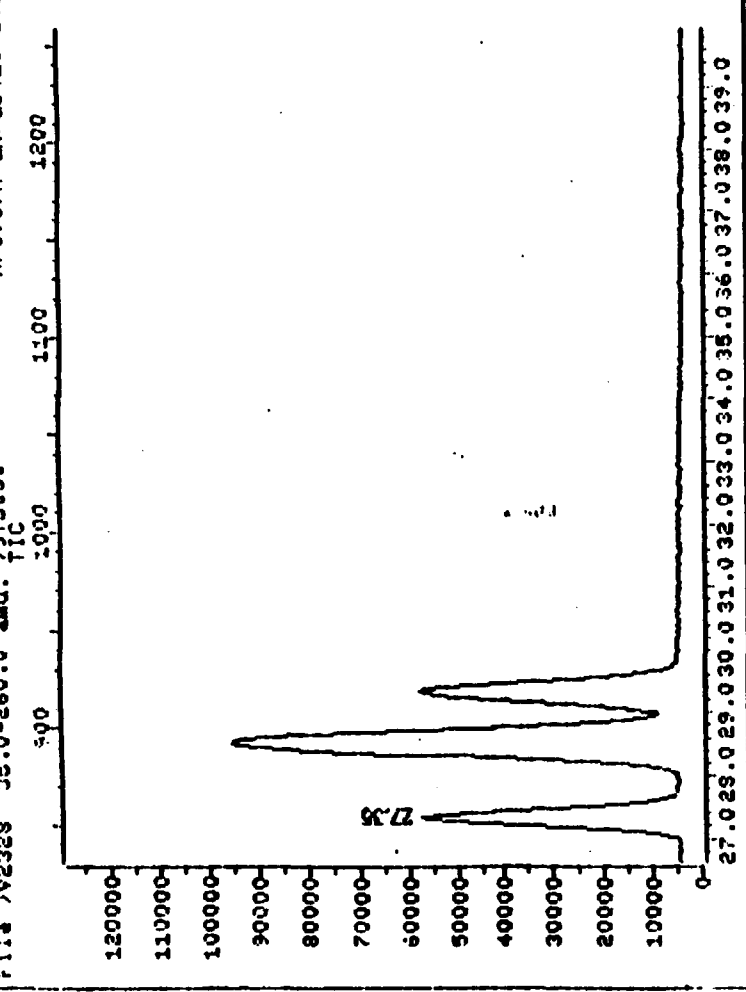


Data File: >V2328:02 Quant Output File: ^V2328:01
Name: USTD050
Misc: HP5987A QR/QC(1042.097.300)P1

Id File: IDUML:EX
Title: CLP VOA ID FILE (PACKED COLUMN)
Last Calibration: 890419 10:17

Operator ID: KAREN
Quant Time: 890419 10:18
Injected at: 890419 09:28

TIC page 2 of 3



Data File: >V2328::02 Quant Output File: ^V2328::01

Name: USTD050.

Misc: HP5987A QA/QC(1042.097.300)P1

Id File: IDUML:EX

Title: CLP UOA ID FILE (PACKED COLUMN)

Last Calibration: 890419 10:17

Operator ID: KAREN

Quant Time: 890419 10:10

Injected at: 890419 09:23

TIC Page 3 of 7

VOLATILE INTERNAL STANDARD AREA SUMMARY

Contract: -

Lab Name: GSC Laboratories, Inc.

Case No.: - SAS No.: - SSG No.: -

File ID (Standard): 002500

Date Analyzed: 4/10/97

Injection ID: 67 1

Time Analyzed: 9:19

Level: (10/med) MED Column: (pack/cas) P004

IS1(BCM)	IS2(DEB)	IS3(CBZ)	RT	AREA #	RT	AREA #	RT	AREA #
12 HOUR STD	81449.	81449.	18.64	523725.	18.64	523725.	21.44	21.44
UPPER LIMIT	162898.	746440.		647450.		647450.		
LOWER LIMIT	40724.	186610.		161865.		161865.		
ERR SAMPLE								
NO.								
01	181322.	369310.	18.63	350754	18.63	350754	21.44	21.44
02	85157.	378683.	18.63	355601.	18.63	355601.	21.44	21.44
03	82495.	389015.	18.63	356240.	18.63	356240.	21.44	21.44

151 (BCM) = Bromochloromethane
 152 (DEB) = 1,4-Difluorobenzene
 153 (CBZ) = Chlorobenzene
 UPPER LIMIT = 100%
 of Internal Standard Area
 LOWER LIMIT = 50%
 of Internal Standard Area

Column used to flag internal standard area values with asterisk

FORM 0111 03A

1.000000

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: GEO Laboratories, Inc.

Contract: -

Lab Code: CBRIEN

Case No.: -

SAS No.: -

SDG No.: -

File ID (Standard): 000332

Date Analyzed: 4/19/89

Instrument ID: 97 1

Time Analyzed: 9:26

Matrix: (soil/water) SOIL Level: (low/med) MED

Column: (pack/cap) PACI

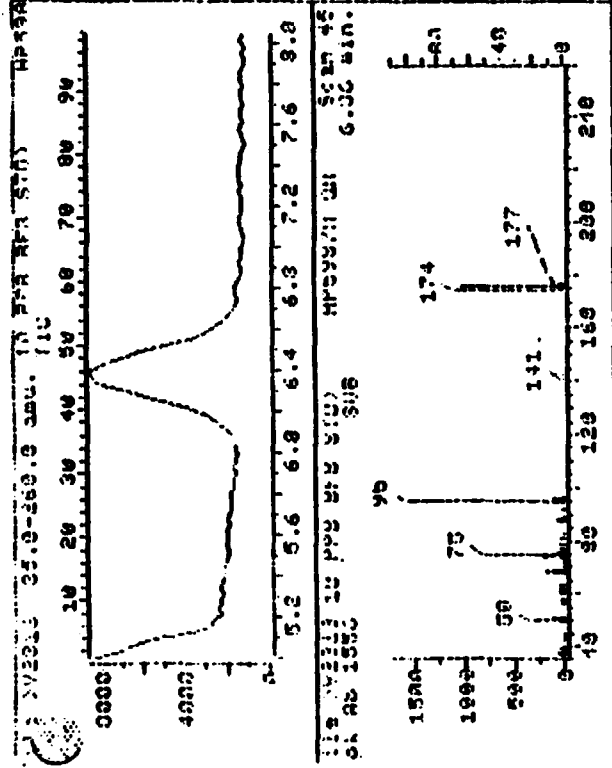
	IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
12 HOUR STD	81442.	8.44	381913.	18.64	324379.	23.45
UPPER LIMIT	162884.		763826.		648758.	
LOWER LIMIT	40721.		190956.		162159.	
EPA SAMPLE NO.						
01 VBLK041901	81799.	8.46	376168.	18.65	332144.	23.45
02 I3591E	81028.	8.44	371528.	18.65	324275.	23.45
03 I3591MS(I3625)	78593.	8.44	363362.	18.66	321416.	23.45
04 I3591MS(I3626)	30727.	8.48	378885.	18.63	350984.	23.45
05 I3592	79887.	8.47	367040.	18.66	329996.	23.45
06 I3593	81591.	8.47	384418.	18.65	339117.	23.45
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS1 (BCM) = Bromochloromethane
 IS2 (DFB) = 1,4-Difluorobenzene
 IS3 (CBZ) = Chlorobenzene-15

UPPER LIMIT = + 100%
 of internal standard area.
 LOWER LIMIT = - 50%
 of internal standard area.

Column used to flag internal standard area values with an asterisk

Raw QC



100% PURE BROMINE STANDARD

Bromofluorobenzene (95%)

m/z	Ion Abundance Criteria		% Relative Abundance		Status
	Base Peak	100% relative abundance	Base Peak	Appropriate Peak	
69	15-20% of mass 95		20.31	20.31	Ok
75	30-40% of mass 95		50.92	50.92	Ok
95	Base peak, 100% relative abundance		100.00	100.00	Ok
96	5-9% of mass 95		7.13	7.13	Ok
177	Less than 2% of mass 174		0.00	0.00	Ok
174	Greater than 50% of mass 95		68.58	68.38	Ok
175	5-9% of mass 174		4.69	6.86	Ok
176	95-100% of mass 174		45.23	95.39	Ok
177	5-9% of mass 174		3.68	5.69	Ok

Injection Date: 04/12/84

Injection Time: 10:54

Date File: >02313

Scan: 45

313
45

10 PWR BFB STD1
SUB

HP5987A QALDC1042.097.3001P1

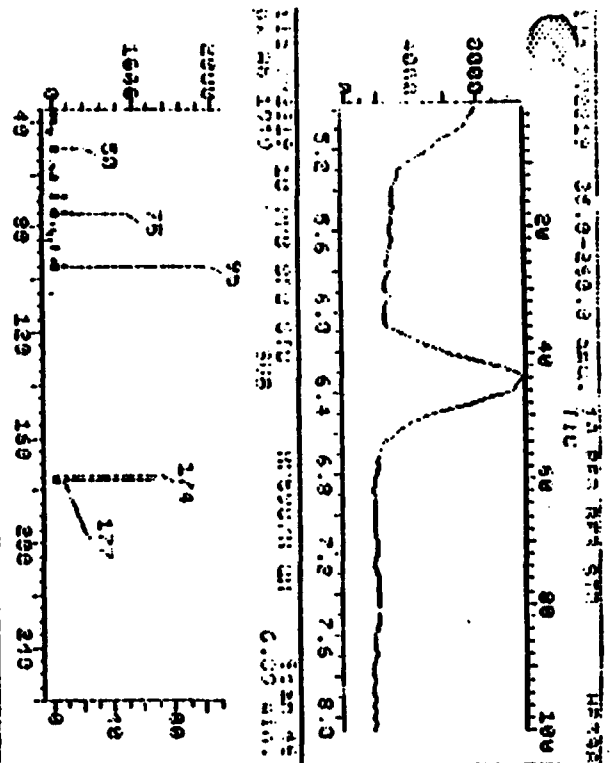
File: 309313 Scan #: 45 Retn. time: 6.34

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
37.05	76.00	50.05	314.00	68.05	177.00	79.05	46.00	95.05	1556.00
38.05	65.00	51.05	126.00	69.05	191.00	81.05	47.00	96.05	111.00
39.05	44.00	56.05	39.00	70.05	9.00	83.05	12.00	97.05	7.00
39.95	1.00	57.20	25.00	72.05	5.00	87.05	85.00	141.15	3.00
41.05	0.00	58.05	24.00	73.05	61.00	88.05	79.00	142.15	2.00
42.05	-8.00	60.05	39.00	74.05	236.00	89.95	10.00	174.00	1064.00
43.05	3.00	61.05	66.00	75.05	783.00	91.05	10.00	175.00	73.00
44.05	-28.00	62.05	55.00	76.05	77.00	92.05	41.00	176.00	1015.00
45.05	9.00	63.05	49.00	77.05	36.00	94.20	164.00	177.00	56.00
49.05	69.00	66.95	-10.00						

MS DATA FILE NUMBER 309313

Sample: 10 PWR BFB STD1 Operator: KADEN MS 4/17/84 10:54
 File: HP5987A QALDC1042.097.3001P1
 MS #1: 1 MS Model: 87 SWHM Rev: 1A SLS #: 0
 Method File: BMS810 Tuning File: M18718 No. of Extra Records: 2
 Source Temp: 300 Analyzer Temp: 280 Transfer Line Temp: 280

Chromatographic temperatures : 220. 220. 0. 0. 0.
 Chromatographic times, min. : 5.0 3.0 0.0 0.0 0.0
 Chromatographic rates, deg/min: .1 0.0 0.0 0.0 0.0

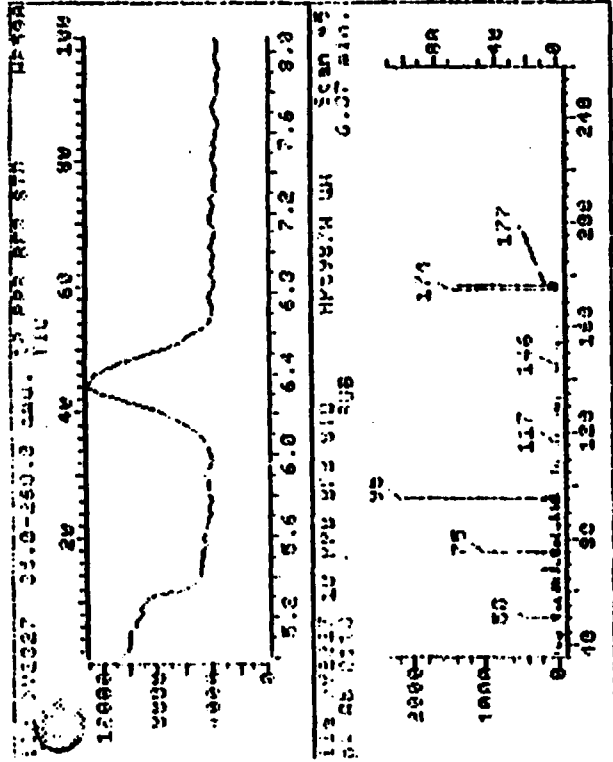


GC 200 (MCPROGRAMM) 2 (CONTINUED)
 REPORT NUMBER: 184-11

RT	ION ABUNDANCE	RT	% RELATIVE ABUNDANCE	STATUS
49	1636	95	100.00	OK
75	1000	174	6.20	OK
95	1000	177	0.00	OK
124	1000	179	6.20	OK
177	1000	180	0.00	OK
179	1000	210	6.20	OK

RT	ION ABUNDANCE	RT	% RELATIVE ABUNDANCE	STATUS
49	1636	95	100.00	OK
75	1000	174	6.20	OK
95	1000	177	0.00	OK
124	1000	179	6.20	OK
177	1000	180	0.00	OK
179	1000	210	6.20	OK

INJECTION TIME: 08:36
 DATE FILE: 202319
 SCAN: 47



6.37 MIN. 000027 33.0-260.3 CHU. 110

Hexafluorobenzene (MFD)

m/z	Ion Abundance		% Relative Abundance		Status
	Peak	Approximate	Peak	Approximate	
75	12.70	10.70	100.00	100.00	OK
95	45.10	45.10	100.00	100.00	OK
117	2.76	2.76	6.12	2.76	OK
146	0.00	0.00	0.00	0.00	OK
177	67.49	67.49	150.31	67.49	OK
174	4.59	6.80	10.18	6.80	OK
176	45.36	96.84	102.79	96.84	OK
178	5.37	5.37	12.02	5.37	OK

Injection Date: 11/19/99

Injection Time: 08:46

Data File: >U2327

Scan: 45

Sample: 200200 Scan #: 45 Retn. time: 6.37

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
37.05	48.00	58.05	-34.00	76.05	21.00	92.20	50.00	140.15	-17.00
72.05	11.00	59.95	11.00	77.05	6.00	93.20	74.00	131.15	8.00
40.05	-28.00	61.05	72.00	78.05	35.00	94.05	235.00	133.15	-29.00
41.05	-18.00	62.05	79.00	79.05	36.00	95.20	213.00	143.15	1.00
43.05	-22.00	63.05	73.00	80.05	7.00	96.00	164.00	144.25	-7.00
43.05	-59.00	64.05	38.00	81.05	98.00	97.20	-4.00	145.15	-21.00
44.05	-100.00	67.05	-2.00	82.05	-29.00	105.20	64.00	146.15	4.00
44.05	3.00	68.05	204.00	83.20	-5.00	107.20	5.00	150.15	-23.00
49.05	70.00	69.05	189.00	84.05	-27.00	109.15	-7.00	153.15	-29.00
50.05	374.00	70.05	15.00	85.05	-29.00	115.15	-16.00	154.15	-91.00
51.05	113.00	71.05	-4.00	86.05	-20.00	117.15	12.00	160.15	-4.00
53.05	-9.00	72.05	-23.00	87.05	122.00	119.15	4.00	174.00	1426.00
54.20	2.00	73.05	62.00	88.05	112.00	127.15	-23.00	175.00	97.00
55.05	-5.00	74.05	291.00	89.05	7.00	128.15	2.00	176.00	1381.00
56.05	53.00	75.05	953.00	91.20	87.00	129.15	3.00	177.00	81.00
57.05	46.00								

Method: SIM Scan Range: 40-100

Sample: 200200 Scan #: 45 Retn. time: 6.37
 Method: SIM Scan Range: 40-100
 Source Temp: 200 Analyze Temp: 250 Transfer Line Temp: 280
 No. of extra records: 2

Chromatographic time, min.: 5.0
 Chromatographic rate, deg/min.: 1
 Chromatographic rate, deg/min.: 1

Method Blanks

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: OBG LABORATORIES, INC. Contract: 3435.001.100

METHOD
BLANK

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL

Lab Sample ID: VBLK041801

Sample wt/vol: 3.8 (g/mL) G

Lab File ID: >V2321

Level: (low/med) MED

Date Received: _____

Moisture: not dec. _____

Date Analyzed: 04/18/89

Column: (pack/cap) PACK

Dilution Factor: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NO.

COMPOUND

Q

74-87-3-----	Chloromethane	1300	U
74-83-9-----	Bromomethane		
75-01-4-----	Vinyl Chloride		
75-00-3-----	Chloroethane		
75-09-2-----	Methylene Chloride	650	
67-64-1-----	Acetone	1300	
75-15-0-----	Carbon Disulfide	650	
75-35-4-----	1,1-Dichloroethane		
75-34-3-----	1,1-Dichloroethane		
540-59-0-----	1,2-Dichloroethane (total)		
67-66-3-----	Chloroform		
107-06-2-----	1,2-Dichloroethane		
78-93-3-----	2-Butanone	750	JB
71-55-6-----	1,1,1-Trichloroethane	650	U
56-23-5-----	Carbon Tetrachloride	650	
108-05-4-----	Vinyl Acetate	1300	
75-27-4-----	Bromodichloromethane	650	
78-87-5-----	1,2-Dichloropropane		
10061-01-5-----	cis-1,3-Dichloropropene		
79-01-6-----	Trichloroethene		
124-48-1-----	Dibromochloromethane		
79-00-5-----	1,1,2-Trichloroethane		
71-43-2-----	Benzene		
10061-02-6-----	trans-1,3-Dichloropropene		
75-25-2-----	Bromoform		
108-10-1-----	4-Methyl-2-Pentanone	380	J
591-78-6-----	2-Hexanone	490	J
127-18-4-----	Tetrachloroethene	650	U
79-34-5-----	I,1,2,2-Tetrachloroethane		
108-88-3-----	Toluene		
108-90-7-----	Chlorobenzene		
100-41-4-----	Ethylbenzene		
100-42-5-----	Styrene		
1330-20-7-----	Xylene (total)		

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

METHOD
BLANK

Lab Name: OBG LABORATORIES INC. Contract: 3435.001.100

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: VBLK041801

Sample wt/vol: 3.8 (g/mL) G Lab File ID: >V2321

Level: (low/med) MED Date Received: _____

‡ Moisture: not dec. _____ Date Analyzed: 04/18/89

Column: (pack/cap) PACK Dilution Factor: 1

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
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20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

QUANT REPORT

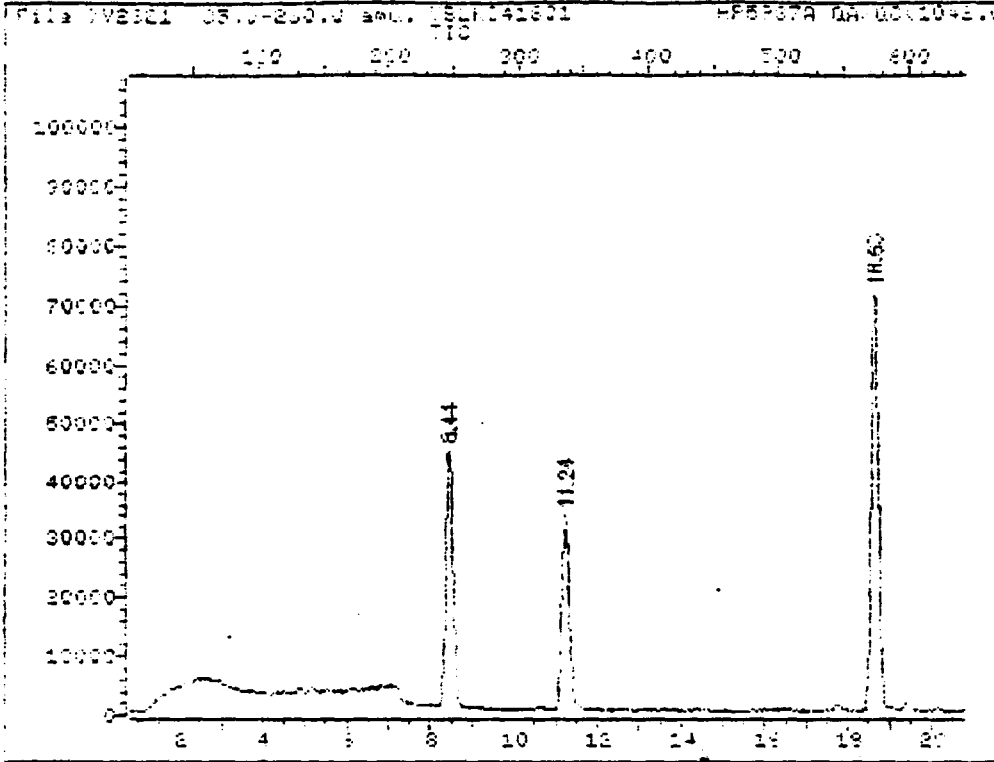
Operator ID: KAREN Quant Rev: 6 Quant Time: 890418 11:32
 Output File: >U2521::D1 Injected at: 890418 10:40
 Data File: >U2521::02 Dilution Factor: 1.00000
 Name: U2LKO41301
 Misc: HP5987A QH/GC(1042.097.300)P1

JD File: IDVHL::EX
 Title: CLP VOA ID FILE (PACKED COLUMN)
 Last Calibration: 890418 11:29

	Compound	R.T.	Q ion	Area	Conc	Units	g
1)	*Bromochloromethane	8.44	128.0	81322M	250.00	NG	98
2)	Methylene Chloride	7.19	50.0	1887M	7.50	NG	78
3)	Acetone	7.14	43.0	2527M	15.73	NG	78
4)	Chloroform	10.37	55.0	2522	2.98	NG	78
15)	1,2-Dichloroethane-d4	11.24	65.0	123931	249.44	NG	80
16)	*1,4-Difluorobenzene	18.63	114.0	369310M	250.00	NG	100
✓19)	2-Butanone	11.36	72.0	1853	23.39	NG	78
21)	Bromobenzene	15.37	132.0	1772	2.12	NG	78
32)	*Chlorobenzene-d5	23.45	117.0	550964	250.00	NG	95
✓33)	4-Methyl-2-pentanone	19.41	43.0	5573M	14.37	NG	78
✓34)	2-Hexanone	20.93	43.0	5563M	18.33	NG	83
37)	Toluene-d8	22.23	98.0	455473	375.60	ND	100
41)	Bromofluorobenzene	27.33	95.0	218859M	256.61	NG	83

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: 002521:02

Quant Output File: 002521:01

Name: 051K001501

Dir: H88987A QA/QC/1042.097.300/P1

Id File: 10000:PER

Title: CLP VOA ID FILE (PACKED COLUMN)

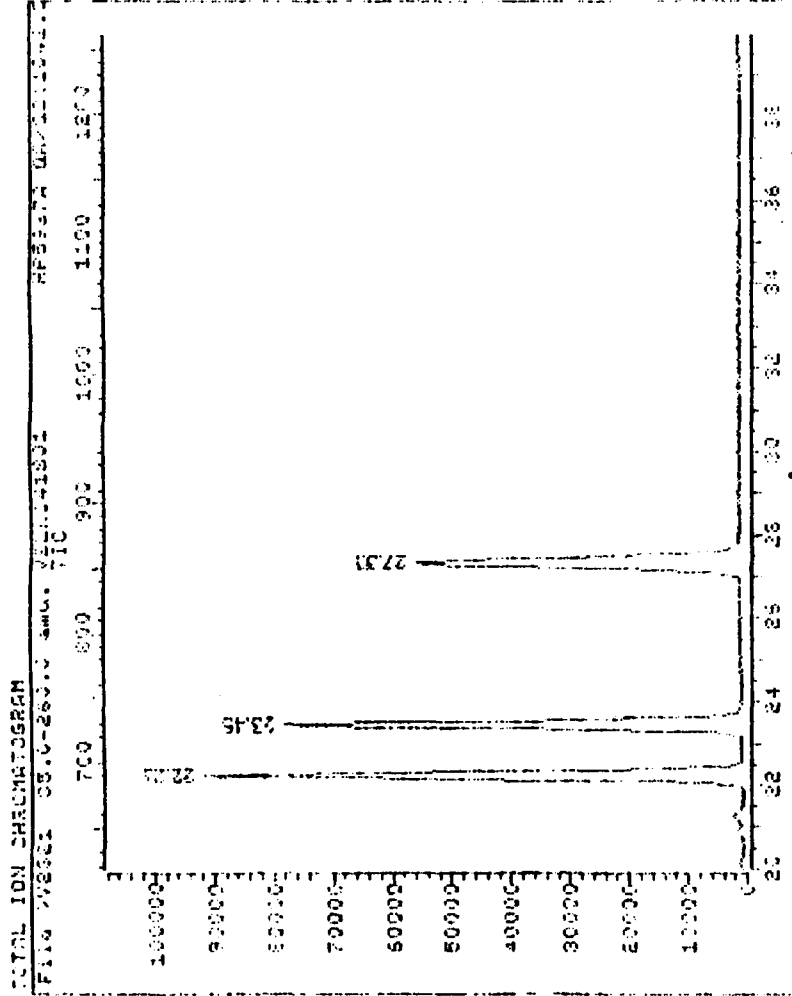
Last Calibration: 890418 11:29

Operator ID: KAREN

Quant Time: 890418 11:52

Injected at: 890418 10:40

TIC page 1 of 1



Data File: >V2321:02 Quant Output File: ^V2321:01
 Name: VELD041501
 Misc: RFP327A SA/OC(1042.097.300)P1

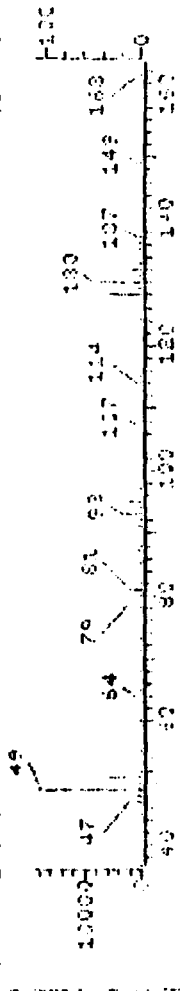
Id File: JOURNAL15E1
 Title: SLP VDA ID FILE (PACKED COLUMN)
 Last Calibration: 890418 11:32

Operator ID: KAREN
 Quant Time: 890413 11:32
 Injected at: 890413 10:00

TIC Page 2 of 2

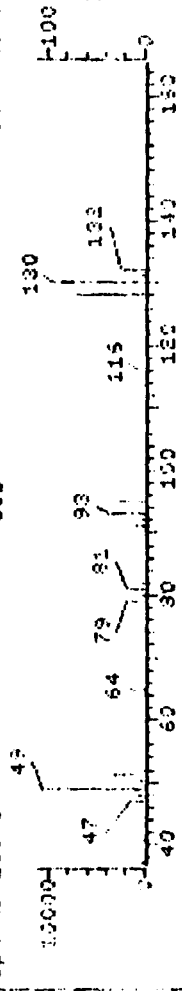
REFERENCE STANDARD SPECTRUM

File: >V0324 Bromochloromethane SUB Scan 541
 Spk No 16940 (15) 08/103 09:58 8.21 min.



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File: >V0321 VBLK041901 HP5987A 08/00<1042.097.30 Scan 246
 Spk No 19043 SUB 8.44 min.



SAMPLE SPECTRUM (UNFILTERED)

File: >V0321 VBLK041901 HP5987A 08/00<1042.097.30 Scan 246
 Spk No 19043 SUB 8.44 min.

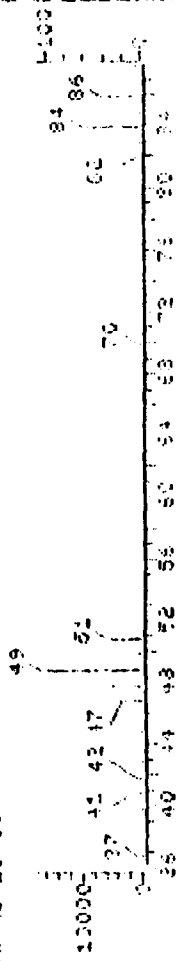


Date File: >V2321:02 Quant Output File: >V2321:001
 Name: VBLK041901
 Name: HP5987A 08/00<1042.097.300>P1 Quant ID File: IDUM1:EX
 Quant Time: 8.50418 11:32 Last Calibration: 870418 11:27
 Injected at: 870418 10:40

Compound No: 1 (1375)
 Compound Name: Bromochloromethane
 Scan Number: 246
 Retention Time: 8.44 min.
 Quant Ion: 129.0
 Mass: 81322M
 Concentration: 250.00 NG
 Invalue: 98

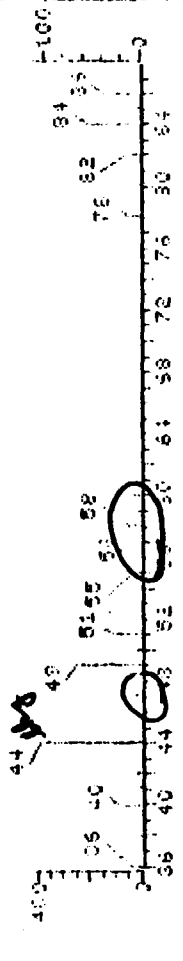
REFERENCE STANDARD SPECTRUM

File: V0390 Methylene chloride SUB Scan 147
 80X 50 15732 800007 11:14 5.02 min.



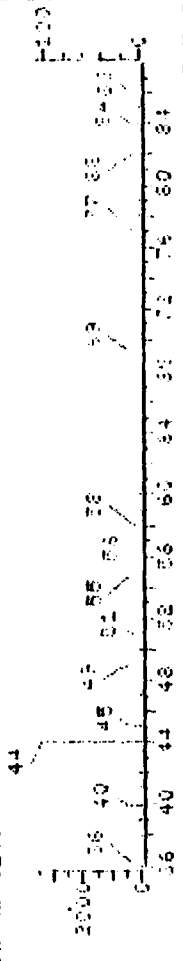
SAMPLE SPECTRUM BACKGROUND SUBTRACTED

File: V0391 V039041501 MF5987A CH GC1010421097.80 Scan 147
 80X 40 167 800007 11:14 5.12 min.



SAMPLE SPECTRUM UNALTERED

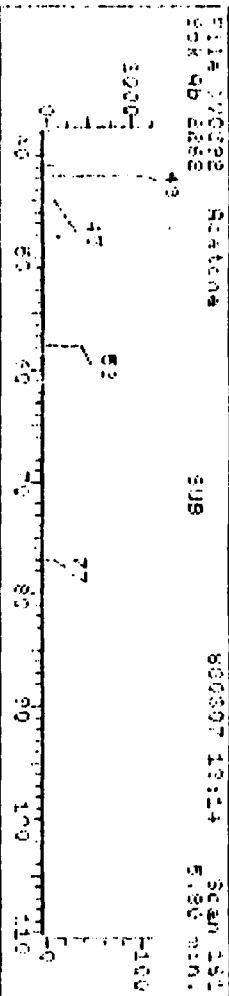
File: V0391 V039041501 MF5987A CH GC1010421097.80 Scan 147
 80X 40 1259 800007 11:14 5.12 min.



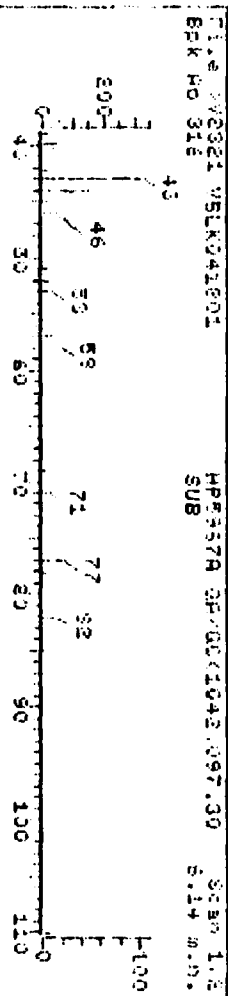
Data File: >V03211.D2 Client Output File: V03211.D1
 Name: U018041501
 Mass: MF5987A CH GC1010421097.80(P1) Client ID File: 10UM10421097
 Start Time: 890415 11:52 Last Calibration: 890416 11:21
 Injected at: 890416 10:40

Compound No: 6
 Compound Name: Methylene Chloride
 Scan Number: 147
 Retention Time: 5.12 min.
 Quant Ion: 50.0
 Area: 1706
 Concentration: 3.50 NG
 Volume: 79

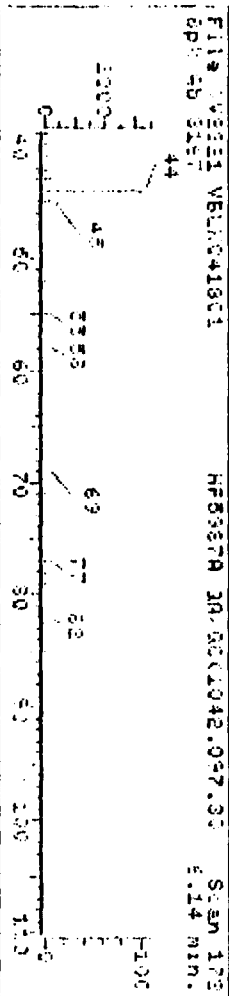
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNLTERED)



Date File: V02321:102

Quant Output File: V02321:101

Name: BELK0-1801

MSID: HPS357A 3R/0000042.097.300191

Quant Time: 8:04:19 11:52

Quant II File: IDVHL:52

Injected at: 8:04:19 10:40

Last Calibration: 8:04:19 11:29

Compound No: 7

Compound Name: Heptone

Scan Number: 173

Retention Time: 6.14 min.

Quant Ion: A3.0

Area: 2537M

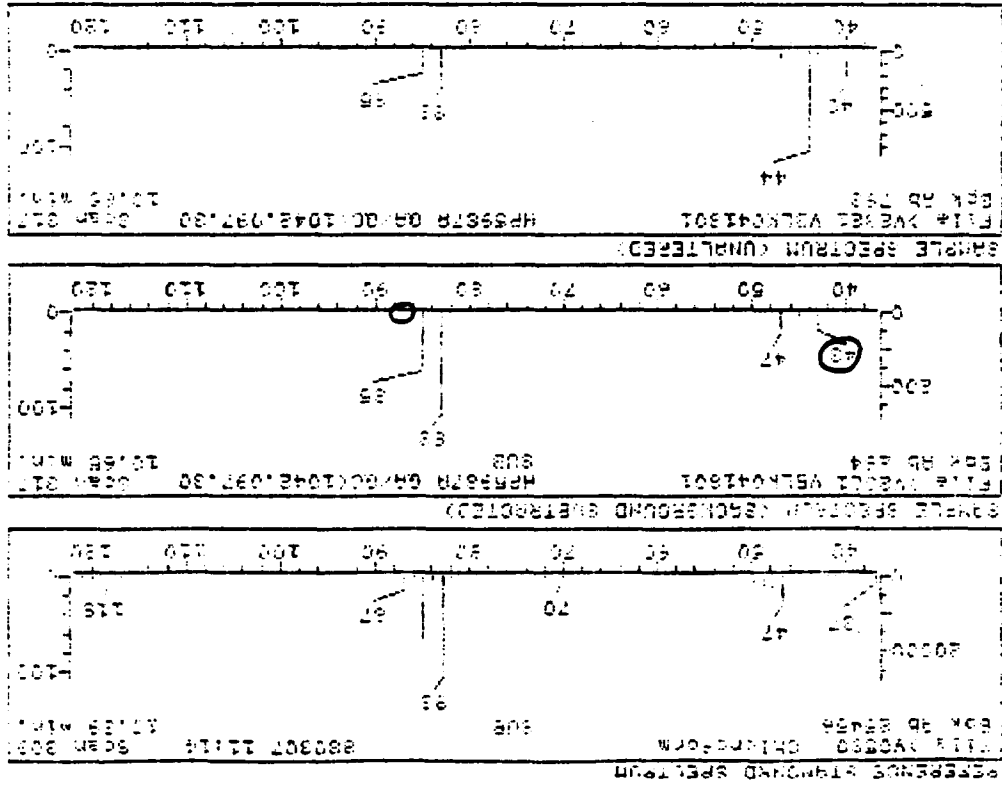
Concentration: 14.75 NG

Qualifier: 75

X

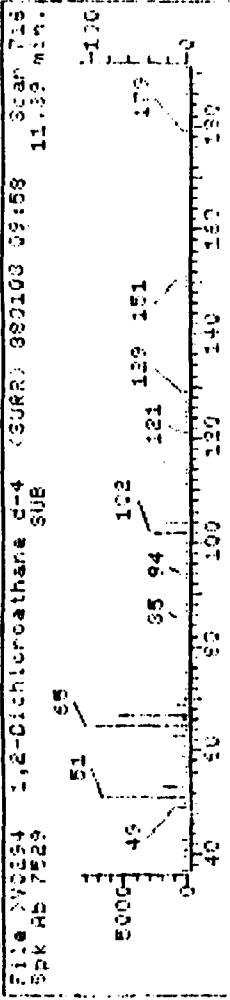
Compound Name: Chlorthalidone
 Compound No: 15
 Batch Number: 217
 Retention Time: 10.65 min
 Quant Ion: 85.0
 Area: 2592
 Concentration: 2.50 MB
 Injections: 50

Name: HPL041801
 Method: HPL041801
 Inj Time: 11:32
 Inj Date: 890418 10:40
 Quant ID File: IONPL181
 Last Calibration: 890418 11:30
 Data File: 02211:02
 Quant Output File: 02211:01

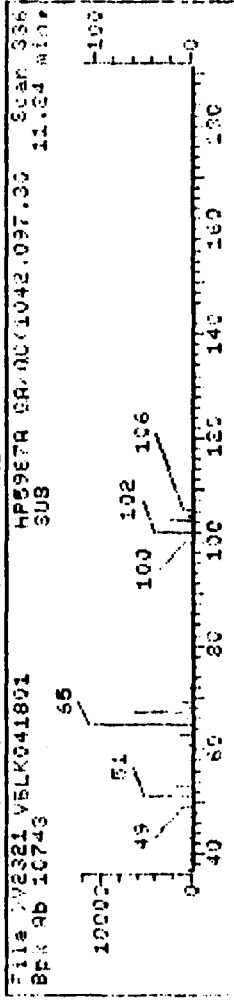


X

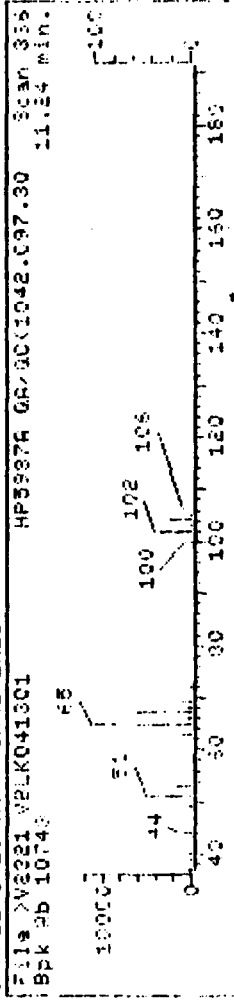
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

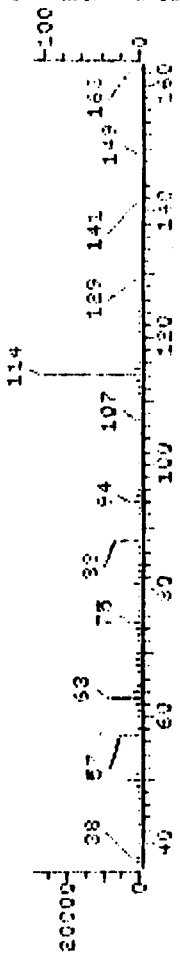


Data File: >V2321:02 Quant Output File: >V2321:01
 Name: VELK041301
 Hisc: HP5987A GR/DC(1042.097.300)F1 Quant ID File: 100ML:02
 Quant Time: 890418 11:52 Last Calibration: 890418 11:27
 Injected at: 890418 10:40

Compound No: 15
 Compound Name: 1,2-Dichloroethane-d4
 Scan Number: 336
 Retention Time: 11.24 min.
 Quant Ion: 65.0
 Area: 123931
 Concentration: 243.44 NG
 q-value: 05

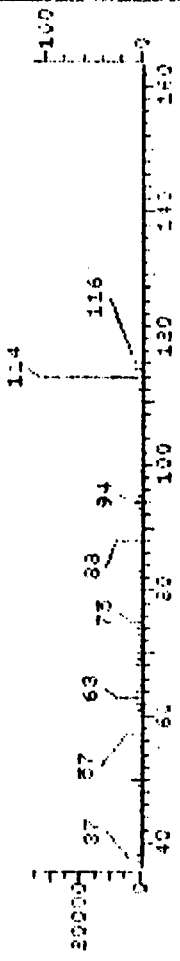
REFERENCE STANDARD SPECTRUM

File: W0094 1,4-DIFLUOROBENZENE (18) 360108 09:58 Scan: 574
 Spk No: 56208 10:50 min.



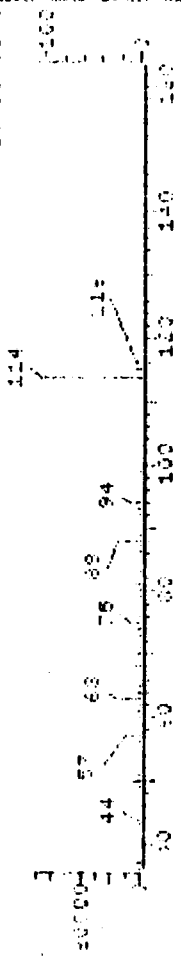
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File: W0094 VSLK041901 HP5987A Q3/QC/1042.097.30 Scan: 574
 Spk No: 31746 19:53 min.



SAMPLE SPECTRUM (UNALTERED)

File: W0094 VSLK041901 HP5987A Q3/QC/1042.097.30 Scan: 574
 Spk No: 31825 19:53 min.



Date File: W02321:D2 Quant Output File: W02321:01
 Name: VSLK041901
 Alias: HP5987A Q3/QC/1042.097.300.D1
 Quant Time: 09:04:13 11:52 Quant ID File: W0094:150
 Injected at: 09:04:12 10:40 Lead Calibration: 09:04:13 11:20

Compound No: 18 (ISTD)
 Compound Name: 1,4-Difluorobenzene
 Peak Number: 574
 Retention Time: 18.63 min.
 Abundance: 114.0
 Area: 3693.0M
 Concentration: 250.00 NG
 R-value: 100

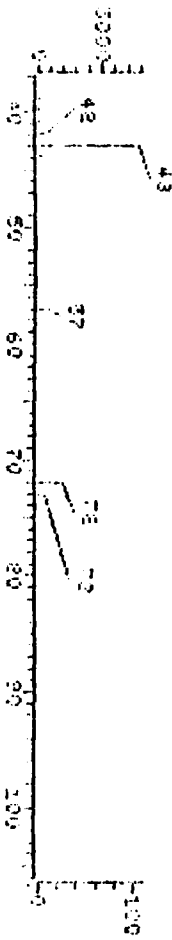
REFERENCE STANDARD SPECTRUM

File: 110592 2-Subanone (NEX)

SUB

300307 19:15

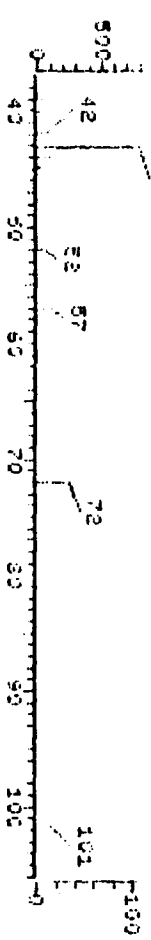
Scan 508
11.14 min.



SAMPLE SPECTRUM - SMOKEPOUND SUBTRACTED

File: 110592 VELN041801

MS5567A OR/OC/1042.097.50
SUB 3 scan 508
11.36 min.



SMILE SPECTRUM (UNPLEATED)

File: 110592 VELN041801

MS5567A OR/OC/1042.097.50
EDX 06 2862 1 scan 143
11.08 min.



Date File: 110521:02

Quant Output File: 110521:01

Name: 05L1K041001

Miss: 855937A OR/OC(1042.097.500)F1

Quant Time: 890418 11:32

Quant ID File: 100615:01

Injected at: 890416 10:40

Last Calibration: 890418 11:20

Compound No: 13

Compound Name: 2-Subanone

Scan Number: 340

Retention Time: 11.36 min.

Quant Ion: 72.0

Area: 1655

Concentration: 20.39 NG

q-value: 98

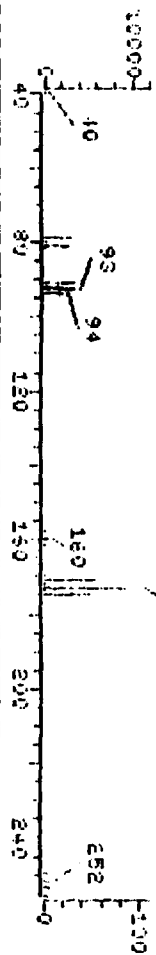
REFERENCE STANDARD SPECTRUM

File: V0631 Bromoform
DPR No 10692

SUB

800307 12:17

Scan 876
18.60 min.

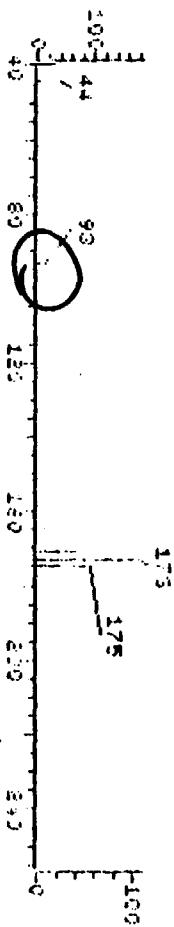


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File: V0631 VBLK041801
DPR No 166

HP5987A QM-AC(1042.097.20)
SUB

Scan 535
18.97 min.

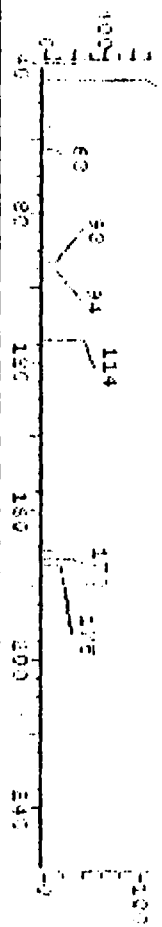


SAMPLE SPECTRUM (UNALTERED)

File: V0631 VBLK041801
DPR No 646

HP5987A QM-AC(1042.097.30)
SUB

Scan 535
18.97 min.



Date File: V02321:1:02

Quant Output File: V02321:1:01

Name: VBLK041801

Mass: HP5997A QM/DC(1042.097.500)P1

Quant Time: 890418 11:52

Quant ID File: 100M11.D

Injected at: 890418 10:40

Last Calibration: 890418 11:20

Compound No: 31

Compound Name: Bromoform

Scan Number: 535

Retention Time: 18.97 min.

Quant Ion: 173.8

Area: 1831

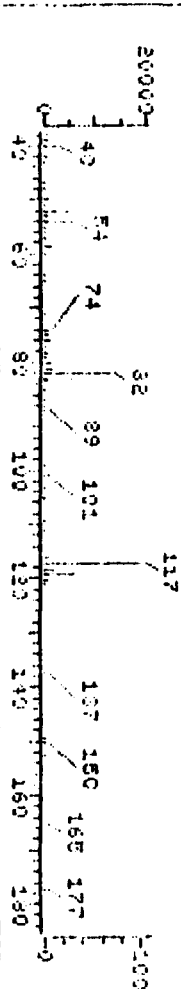
Concentration: 4.16 ng

q-value: 92

X

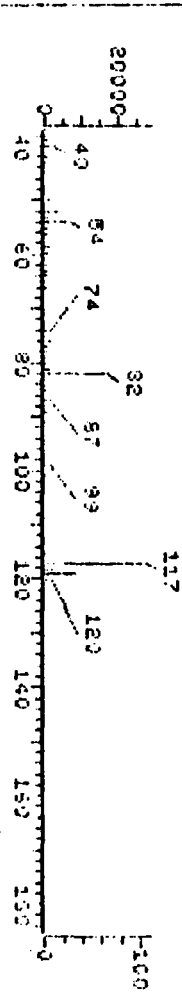
REFERENCE STANDARD SPECTRUM

File: 070294 Chlorobenzene d-6 SUB (IC) 860103 09:16 Scan 1491
 Box: Ab 15024 23:50 min.



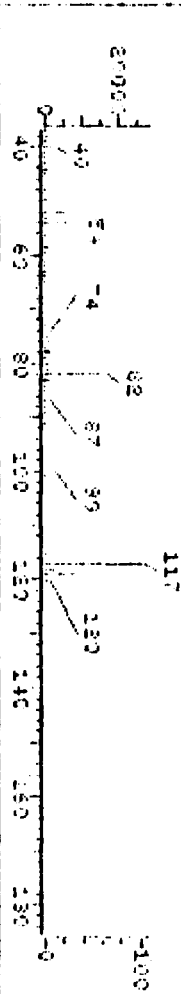
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File: 072521 WELK041801 HP5987A GR/OC(1042.097.300) Scan 729
 Box: Ab 26112 23:45 min.



SAMPLE SPECTRUM (UNFILTERED)

File: 072521 WELK041801 HP5987A GR/OC(1042.097.300) Scan 729
 Box: Ab 26112 23:45 min.



Data File: 072521:102 Quant Output File: 072521:101

Name: WELK041801

Inst: HP5987A GR/OC(1042.097.300)P1

Quant Time: 890418 11:52

Quant ID File: J01HL184

Injected at: 890418 10:40

Last Calibration: 890418 11:21

Compound No: 32 (ISTD)

Compound Name: Chlorobenzene-d6

Scan Number: 729

Retention Time: 23.45 min.

Quant Ion: 117.0

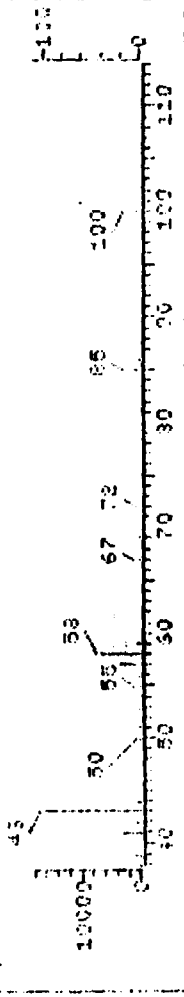
Area: 350964

Concentration: 250.00 NG

G-values: 96

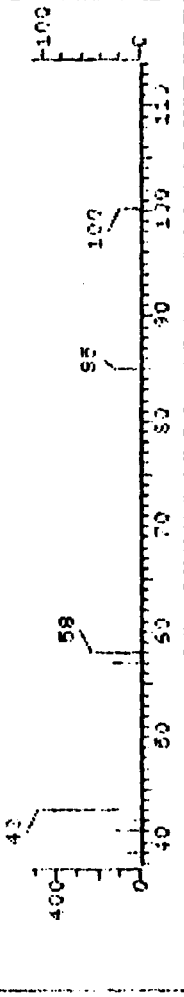
REFERENCE STANDARD SPECTRUM

File: V2321 V2321 4-Methyl-2-pentanon (MIBK) 880007 10:14 Scan 599
 Spk Ab 16316 SUB 19.41 min.



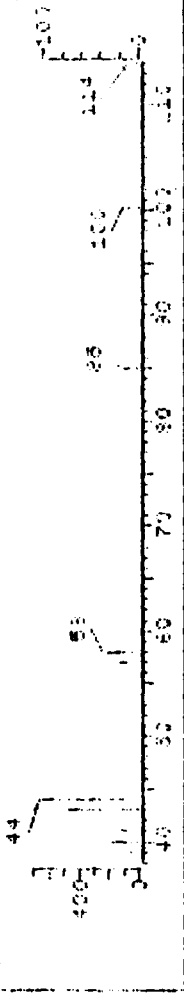
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File: V2321 VBLK041801 MF5987A QA/QC(1042.097.30)PI Scan 599
 Spk Ab 463 SUB 19.41 min.



SAMPLE SPECTRUM (UNALTERED)

File: V2321 VBLK041801 MF5987A QA/QC(1042.097.30)PI Scan 599
 Spk Ab 524 SUB 19.41 min.

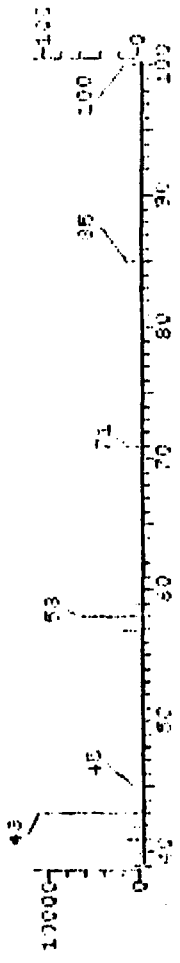


Date File: >V2321:02 Quant Output File: >V2321:01
 Name: VBLK041801
 Misc: MF5987A QA/QC(1042.097.300)PI Quant ID File: IGVMI:03
 Quant Time: 900418 11:32 Last Calibration: 890418 11:21
 Injected at: 890418 10:40

Compound No: 33
 Compound Name: 4-Methyl-2-pentanon
 Scan Number: 599
 Retention Time: 19.41 min.
 Injct Ion: 43.0
 Area: 5573M
 Concentration: 14.37 NG
 q-value: 85

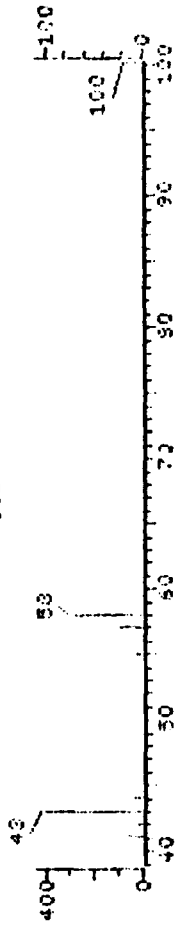
REFERENCE STANDARD SPECTRUM

File: >V0322 2-Hexanone SUB 890307 10:24 Scan 641
 Spk No 10622 20.70 min.



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File: >V0321 VBLK041801 HP5987A QM GC(1042.097.30) Scan 643
 Spk No 398 20.95 min.



SAMPLE SPECTRUM (UNALTERED)

File: >V0321 VBLK041801 HP5987A QM GC(1042.097.30) Scan 643
 Spk No 644 20.95 min.

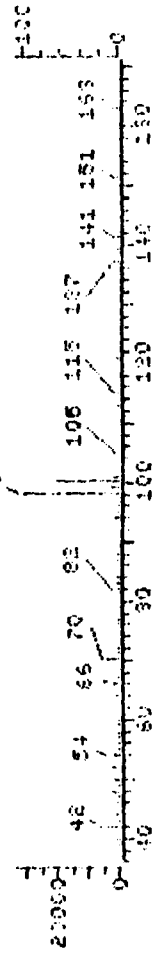


Date File: >V0321:02 Quant Output File: >V0321:01
 Name: VBLK041801
 File: HP5987A QM GC(1042.097.300)P1 Quant ID File: I0VHL:02
 Quant Time: 890418 11:52 Last Calibration: 970418 11:27
 Injected at: 890418 10:40

Compound No: 34
 Compound Name: 2-Hexanone
 Scan Number: 648
 Retention Time: 20.93 min.
 Quant Ion: 43.0
 Area: 3559M
 Concentration: 18.53 MG
 q-value: 45

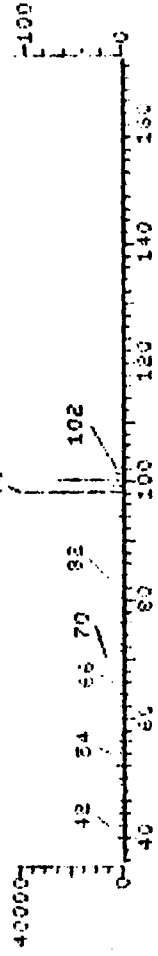
REFERENCE STANDARD SPECTRUM

File: 700294 Toluene 3-3 (GURR) 880108 08:10 Scan: 1421
PK AB 31960 22:23 min.



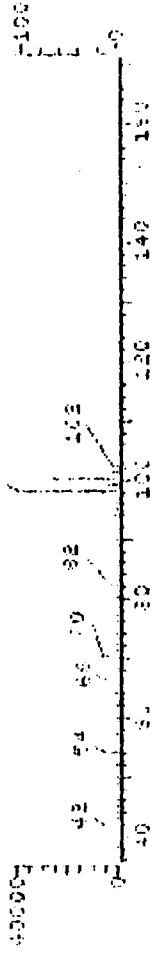
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File: 700294 MELK041501 HP5987A 08/00/1042.097.00 Scan: 690
SPK AB 37384 22:23 min.



SAMPLE SPECTRUM (UNALTERED)

File: 700294 MELK041501 HP5987A 08/00/1042.097.00 Scan: 690
SPK AB 37384 22:23 min.



Save File: 702321:02 Quant Output File: 702321:01
 Name: MELK041501
 Mass: HP5987A 08/00/1042.097.0000.P1 Quant ID File: 120ML:4E3
 Injected at: 850418 10:40 Last Calibration: 890418 11:25

Compound No: 37
 Compound Name: Toluene-d8
 Scan Number: 490
 Retention Time: 22.23 min.
 Quant Ion: 92.0
 Area: 455475
 Concentration: 255.60 NG
 q-value: 100

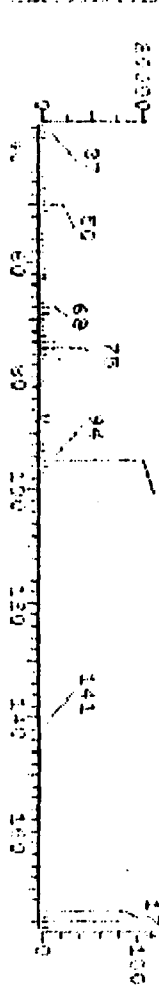
REFERENCE STANDARD SPECTRUM

File: 100823
 BPK NO 15144

1-Bromofluorobenzene
 SUE

(300K) 890525 17:15

Scan 27
 27.05 min



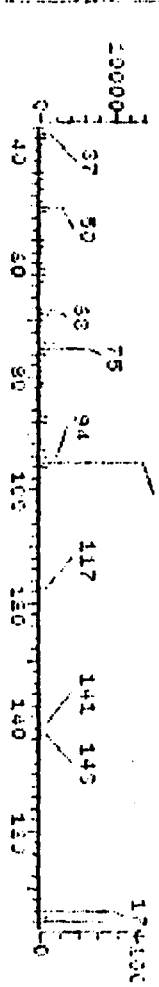
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File: 100821
 BPK NO 12815

MS98679 GM/DC(1042.097.00
 SUE

MS98679 GM/DC(1042.097.00
 SUE

Scan 27
 27.33 min



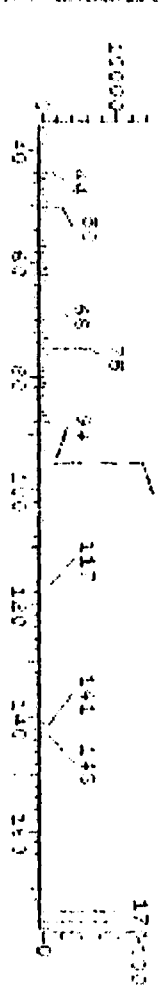
SAMPLE SPECTRUM (UNALTERED)

File: 100821
 BPK NO 12815

MS98679 GM/DC(1042.097.00
 SUE

MS98679 GM/DC(1042.097.00
 SUE

Scan 27
 27.32 min



Date File: 100821:02

Quant Output File: 100821:02

Name: BELK041801

Miss: MS98679 GM/DC(1042.097.300)PI

Quant Time: 890418 11:51

Quant ID File: 100821:02

Injected at: 890418 10:40

Last Calibration: 890418 11:42

Compound No: 41

Compound Name: 2-bromofluorobenzene

Scan Number: 354

Retention Time: 27.33 min

Quant Ion: 95.0

Area: 216859M

Concentration: 156.81 ug

q-value: 34

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

METHOD
BLANK

Lab Name: OBG LABORATORIES, INC. Contract: 3435.001.100

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: VBLK04/901

Sample wt/vol: 3.9 (g/mL) G Lab File ID: >V2329

Level: (low/med) MED Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 04/19/89

Column: (pack/cap) PACK Dilution Factor: 1

CONCENTRATION UNITS: _____
(ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/KG</u>	Q
74-87-3	-----Chloromethane	1300	U
74-83-9	-----Bromomethane		
75-01-4	-----Vinyl Chloride		
75-08-3	-----Chloroethane	↓	
75-09-2	-----Methylene Chloride	630	
67-64-1	-----Acetone	1300	
75-15-0	-----Carbon Disulfide	630	
75-35-4	-----1,1-Dichloroethane		
75-34-3	-----1,1-Dichloroethane		
540-59-0	-----1,2-Dichloroethane (total)		
67-68-3	-----Chloroform	↓	
107-86-2	-----1,2-Dichloroethane	↓	
78-93-3	-----2-Butanone	1300	
71-53-6	-----1,1,1-Trichloroethane	630	
56-23-5	-----Carbon Tetrachloride	630	
108-85-4	-----Vinyl Acetate	1300	
75-27-4	-----Bromodichloromethane	630	
78-87-5	-----1,2-Dichloropropane		
10061-01-5	-----cis-1,3-Dichloropropene		
79-01-6	-----Trichloroethene		
124-48-1	-----Dibromochloromethane		
79-08-5	-----1,1,2-Trichloroethane		
71-43-2	-----Benzene		
10061-02-6	-----trans-1,3-Dichloropropene		
75-25-2	-----Bromoform	↓	
108-18-1	-----4-Methyl-2-Pentanone	1300	
591-78-6	-----2-Hexanone	1300	
127-18-4	-----Tetrachloroethene	630	
79-34-5	-----1,1,2,2-Tetrachloroethane		
108-88-3	-----Toluene		
108-98-7	-----Chlorobenzene		
100-41-4	-----Ethylbenzene		
100-42-5	-----Styrene		
1330-20-7	-----Xylene (total)	↓	↓

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

METHOD
 BLANK

Lab Name: OBG LABORATORIES, INC. Contract: 3435.001.100

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: YBLK041901

Sample wt/vol: 3.9 (g/mL) G Lab File ID: >V2329

Level: (low/med) MED Date Received: _____

Moisture: not dec. _____ Date Analyzed: 04/19/89

Column: (pack/cap) PACK Dilution Factor: 1

Number TICs found: 0

CONCENTRATION UNITS:
 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

QUANT REPORT

Operator ID: KAREN
 Output File: \V2329:01
 Data File: >V2329:02
 Name: UBLK041901
 File: H95267A 22/0C(1042.097.300)P1
 Quant Rev: 6
 Quant Time: 890419 11:23
 Injected at: 890419 10:20
 Dilution Factor: 1.00000

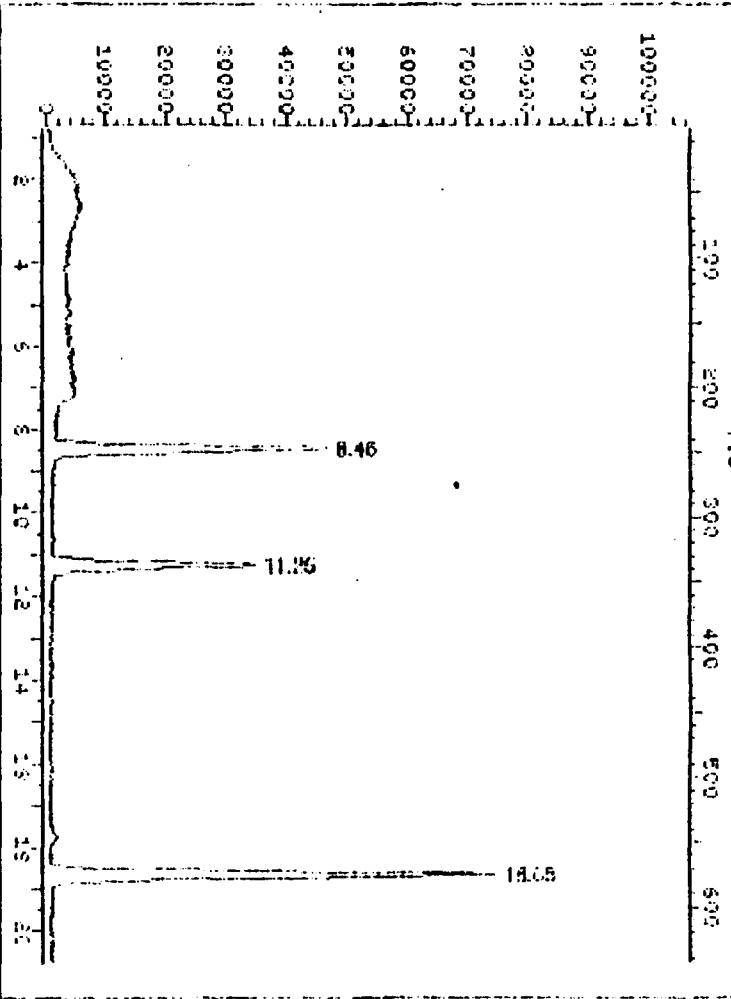
ID File: IDVHL:EX
 Title: CLP_VCA ID FILE (PACKED COLUMN)
 Last Calibration: 890419 10:58

Compound	R.T.	Q	ion	Area	Conc	Units	g
1) *Bromochloromethane	8.46	128.0		81799	250.00	NG	97
15) 1,2-Dichloroethane-d4	11.25	65.0		124276	257.08	NG	84
18) *1,4-Difluorobenzene	18.65	114.0		376168M	250.00	NG	100
32) *Chlorobenzene-d5	23.43	117.0		352144M	250.00	NG	97
37) Toluene-d8	22.22	98.0		447792	259.68	NS	100
41) Bromofluorobenzene	27.35	95.0		217576M	259.37	NG	81

* Compound is ISTD

TOTAL ION CHROMATOGRAM

File: 003529 35.0-260.0 min. VDLK041901 HP5987A JM/DC/042.9



Data File: 002529.:DZ Quant Output File: 002529.:DZ

Name: VDLK041901

MSID: HP5987A JM/DC(1042.097.300)P1

ID File: IDUML1:EX

Title: CLP UDA ID FILE (PACKED COLUMN)

Last Calibration: 890419 10:53

Operator ID: KAREN

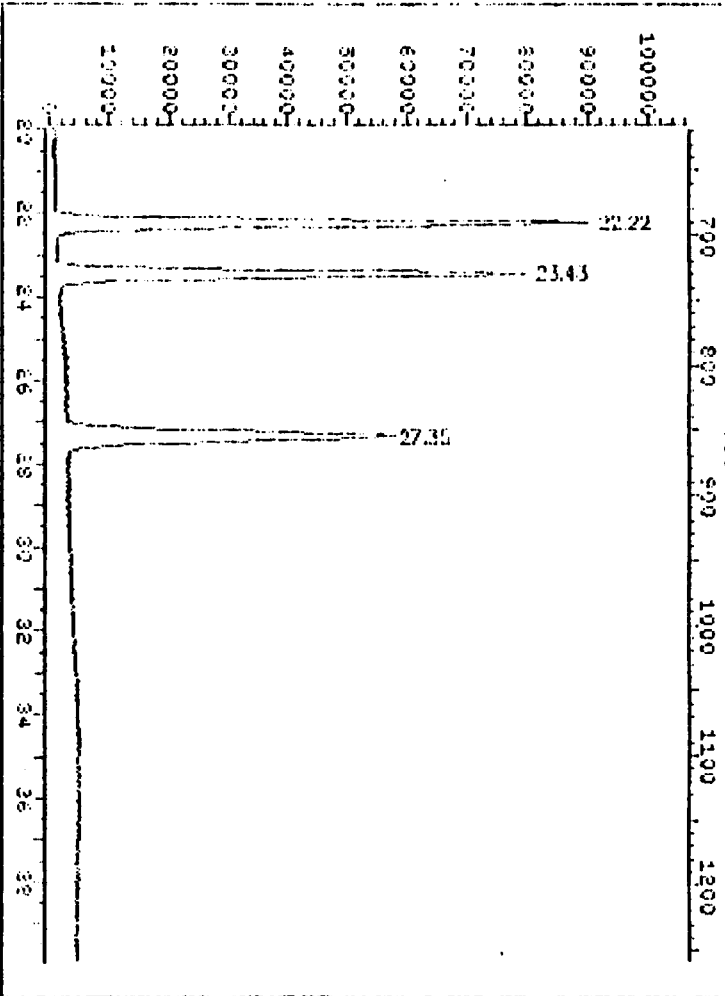
Quant Time: 890419 11:22

Injected at: 890419 10:29

TIC page 1 of 2

TOTAL ION CHROMATOGRAM

File: 4859879 38.0-850.0 amu. WELLS1901 H859879 08/30/1992



Data File: 4859879:02

Quant Output File: 4859879:01

Name: WELLS1901

Mass: H859879 08/30/92(1042.097.500):1

ID File: FLUOR1901

File: CLP USA ID FILE (PACKED COLUMN)

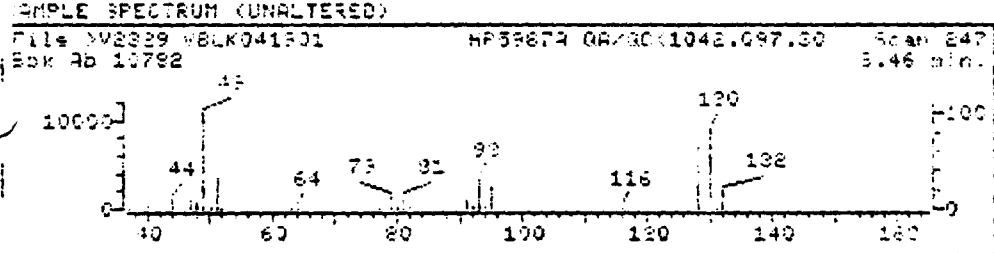
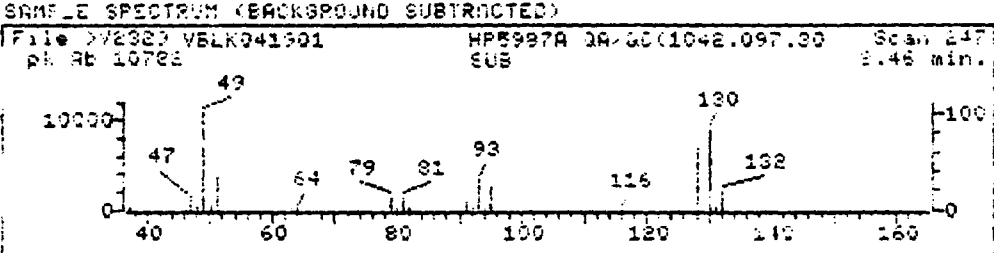
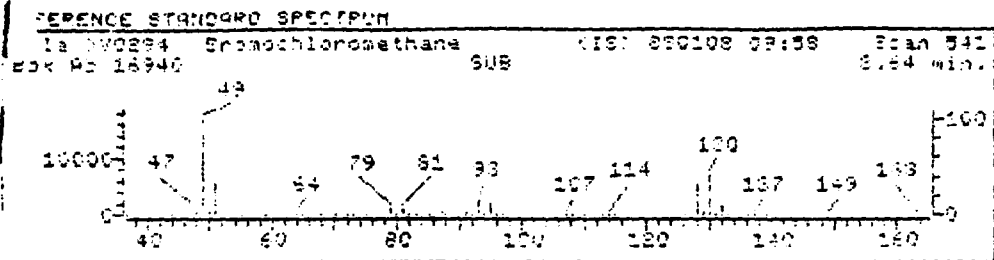
Last Calibration: 890419 10:53

Operator ID: KAREN

Quant Time: 890419 11:22

Injected at: 890419 10:27

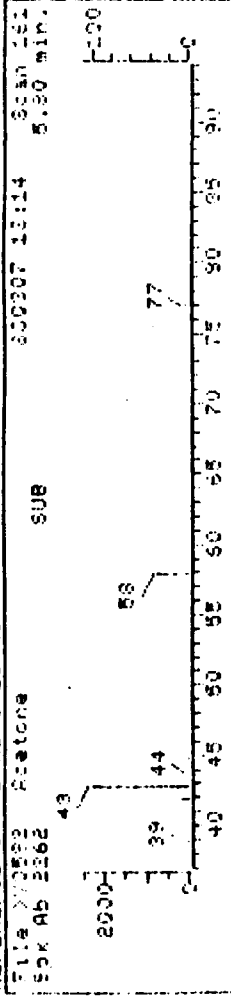
TIC Page 2 of 2



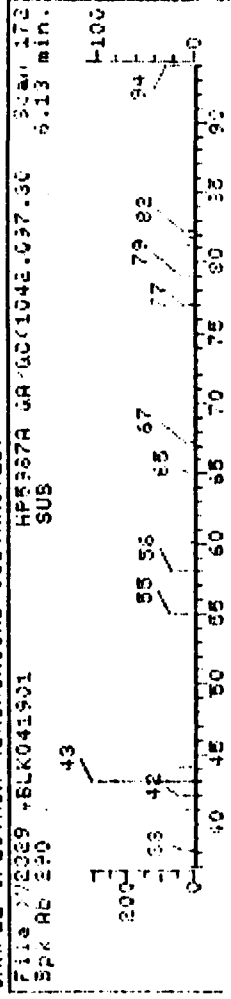
Data File: 02329::D2 Quant Output File: 02329::D1
 Name: VELK041901
 Misc: HP5987A QA/QC(1042.097.30)P1
 Quant Time: 890419 11:22 Quant ID File: IDUML:EX
 Injected at: 890419 10:29 Last Calibration: 890419 10:58

Compound No: 1 (ISTD)
 Compound Name: Bromochloromethane
 Scan Number: 247
 Retention Time: 8.46 min.
 Quant Ion: 128.0
 Area: 31799
 Concentration: 250.00 NG
 q-value: 97

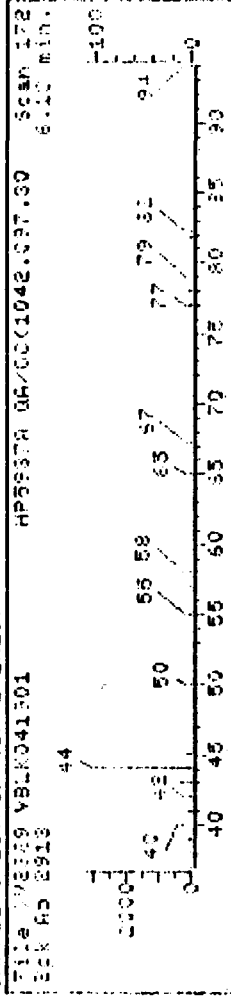
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



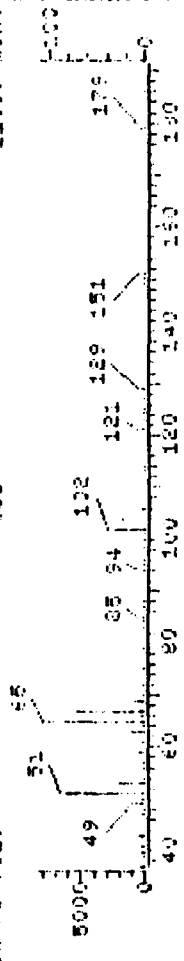
Data File: ^V2329::D2 Quant Output File: ^V2329::D1
 Name: V02K041901
 Misc: HPS97A GR/GC(1042.097.300)P1
 Quant Time: 890419 11:22 Quant IO File: IDVIL:EX
 Injected at: 890419 10:29 Last Calibration: 890419 10:00

Compound No: 7
 Compound Name: Acetone
 Scan Number: 172
 Retention Time: 6.13 min.
 Quant Ion: 43.0
 Area: 2929M
 Concentration: 18.95 mg
 Quality: 70

X

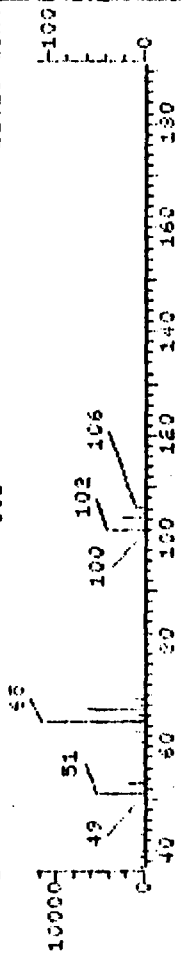
REFERENCE STANDARD SPECTRUM

File: V00294 1,2-Dichloroethane d-4 (SUFR) 880108 09:10 Scan 116
 Spk nb 10969 11.25 min.



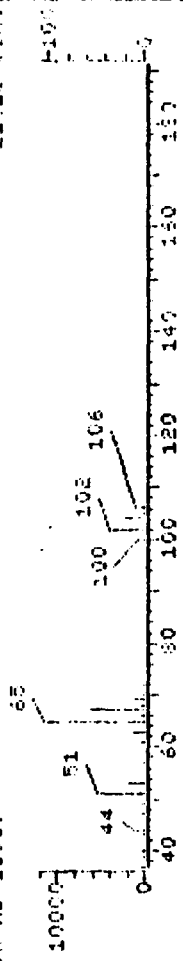
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File: V02329 VELK041901 HP5987A GA/GC(1042.097.30) Scan 387
 Spk nb 10969 11.25 min.



SAMPLE SPECTRUM (UNALTERED)

File: V02329 VELK041901 HP5987A GA/GC(1042.097.30) Scan 387
 Spk nb 10969 11.25 min.



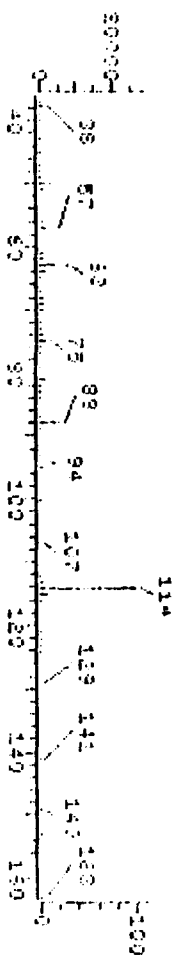
Data File: >U2329::02 Quant Output File: ^U2329::01
 Name: VELK041901
 Misc: HP5987A GA/GC(1042.097.300)P1 Quant ID File: I00ML:03
 Quant Time: 890419 11:22 Last Calibration: 890419 10:58
 Injected at: 890419 10:29

Compound No: 15
 Compound Name: 1,2-Dichloroethane-d4
 Scan Number: 377
 Retention Time: 11.25 min.
 Quant Ion: 85.0
 Area: 124276
 Concentration: 257.08 NG
 q-value: 84

REFERENCE STANDARD SPECTRUM

File #V03294 1,4-Difluorobenzene

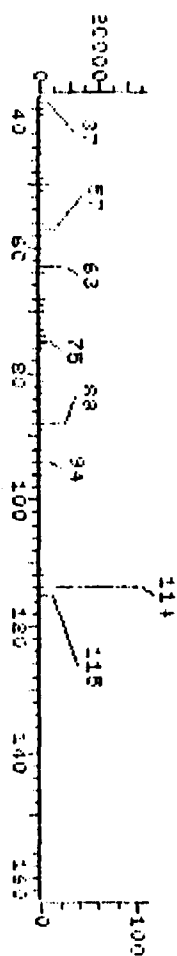
809108 09:59 16.80 min.



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File #V03294 1,4-Difluorobenzene

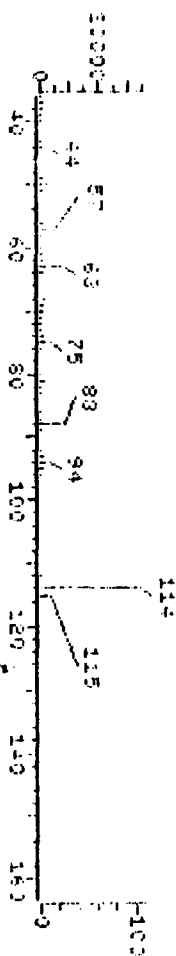
809108 09:59 16.80 min.



SAMPLE SPECTRUM (UNFILTERED)

File #V03294 1,4-Difluorobenzene

809108 09:59 16.80 min.



Data File: V03229:02

Quant Output File: V03229:01

Name: V03229:01

MSID: HP5987A GR/OC1042.097.300.P1

Quant Time: 890419 11:22

Quant ID File: I090419:02

Injected at: 890419 10:29

Last Calibration: 890419 17:58

Compound No: 19 (ISTD)

Compound Name: 1,4-Difluorobenzene

Scan Number: 575

Retention Time: 18.85 min.

Quant Ion: 114.0

Area: 376165M

Concentration: 250.00 NG

q-value: 100

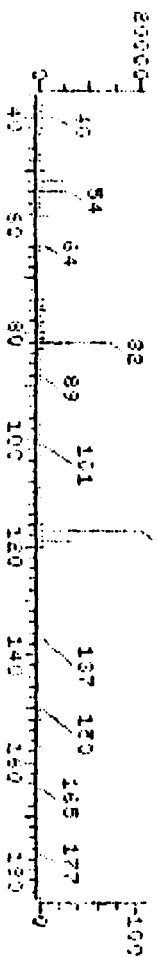
REFERENCE STANDARD SPECTRUM

FILE: V02824
SPX NO 19024

SUB

(13: 830108 09:18

Scan 1431
23.43 min.

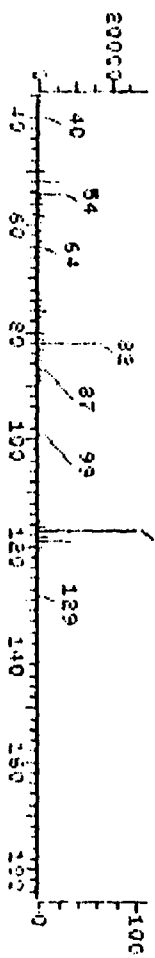


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

FILE: V02329 VILK041901

HP5987A GM/OC(1042.097.30
SUB

Scan 729
23.43 min.

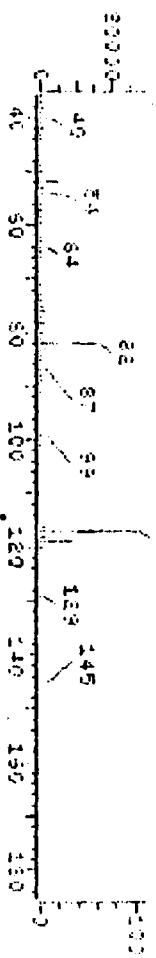


SAMPLE SPECTRUM (UNFILTERED)

FILE: V02329 VILK041901

HP5987A GM/OC(1042.097.30
SUB

Scan 729
23.43 min.



Quant Output File: V02329:01

DATA File: V02329:02

Name: VOLK041901

Misc: HP5987A GM/OC(1042.097.300)P1

Quant Time: 050419 11:22

Injected at: 090419 10:29

Compound No: 32 (ISTD)

Compound Name: Chlorobenzene-d5

Scan Number: 729

Retention Time: 23.43 min.

Quant Ion: 117.0

Area: 352144M

Concentration: 250.00 NG

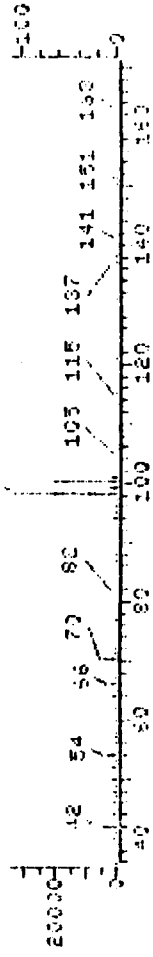
Offset: 97

Quant ID File: I30M094EX

Last Calibration: 050419 10:58

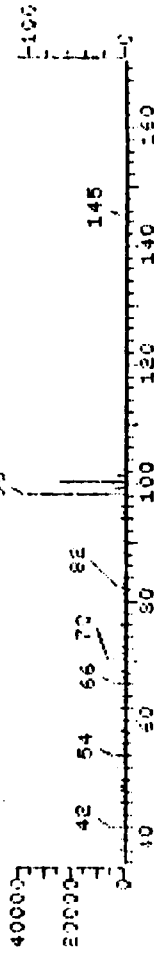
REFERENCE STANDARD SPECTRUM

File: \000054 Toluene d-5 (SURF) 080106 09:59 Scan 590 1414
 Spk No 31050 22.59 min.



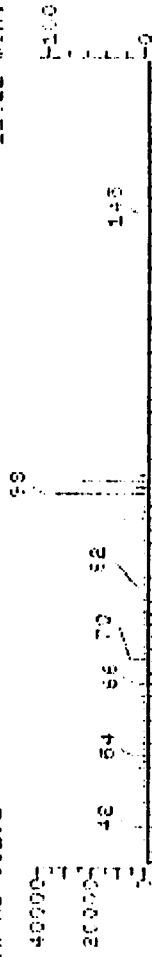
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File: \000054 VELK041901 HP5987A QM/OC(1042.097.30 Scan 590
 Spk No 36192 22.22 min.



SAMPLE SPECTRUM (UNALTERED)

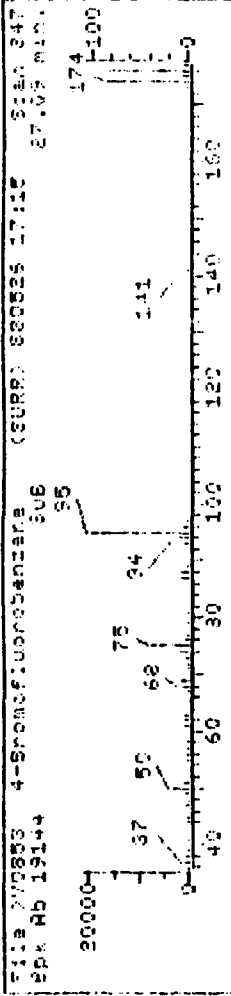
File: \000054 VELK041901 HP5987A QM/OC(1042.097.30 Scan 590
 Spk No 36192 22.22 min.



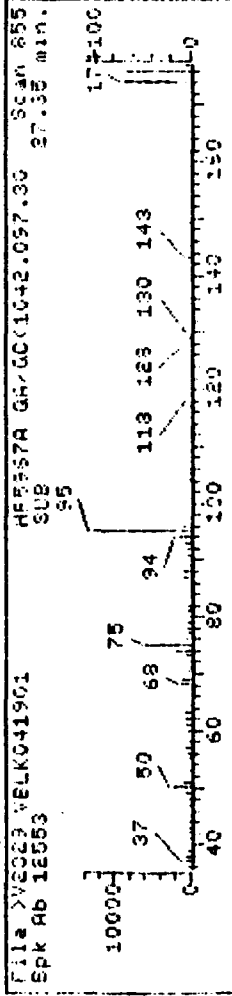
Date File: \02329:02 Quant Output File: \02329:01
 Name: VELK041901
 Also: HP5987A QM/OC(1042.097.300)P1
 Quant Time: 850419 11:22 Quant ID File: IDVNL:EX
 Injected at: 893419 10:29 Last Calibration: 850419 10:58

Compound No: 57
 Compound Name: Toluene-d5
 Scan Number: 650
 Retention Time: 22.22 min.
 Quant Ion: 94.0
 Area: 447752
 Concentration: 259.66 NG
 Area: 10)

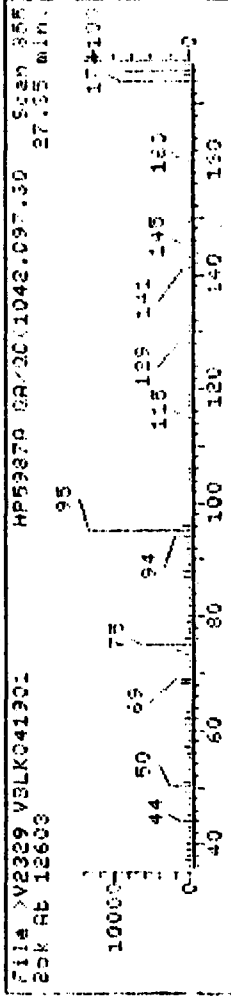
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >V2329::D2

Name: VELK041901

Misc: HP5987A GR/OC(1042.097.300)P1

Quant Time: 890419 11:22

Injected at: 890419 10:29

Quant Output File: >V2329::D1

Quant ID File: IDUMLS1E1

Last Calibration: 890419 10:59

Compound No: 41

Compound Name: Bromofluorobenzene

Scan Number: 855

Retention Time: 27.35 min.

Quant Ion: 95.0

Area: 217576M

Concentration: 259.57 NG

q-value: 82

Matrix Spike

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TP4 - Matrix
Test pit Spike
Sub Sample

Lab Name: OBG LABORATORIES, INC. Contract: 3435.001.100

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: I359/MS = I3625

Sample wt/vol: 4.0 (g/mL) 6 Lab File ID: >V2331

Level: (low/med) MED Date Received: 04/14/89

% Moisture: not dec. 49 Date Analyzed: 04/19/89

Column: (pack/cap) PACK Dilution Factor: 1

CONCENTRATION UNITS:

(ug/L or ug/Kg) ug/Kg

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>ug/Kg</u>	Q
74-87-3	Chloromethane	2500	U
74-83-9	Bromomethane	2500	U
75-01-4	Vinyl Chloride	540	J
75-00-3	Chloroethane	2500	U
75-09-2	Methylene Chloride	1200	U
67-64-1	Acetone	2500	U
75-15-0	Carbon Disulfide	1200	U
75-35-4	1,1-Dichloroethene	1200	U
75-34-3	1,1-Dichloroethane	1200	U
540-59-0	1,2-Dichloroethene (total)	430	J
67-66-3	Chloroform	220	J
107-06-2	1,2-Dichloroethane	1200	U
78-93-3	2-Butanone	890	J
71-55-6	1,1,1-Trichloroethane	1200	U
56-23-5	Carbon Tetrachloride	1200	U
108-05-4	Vinyl Acetate	2500	U
75-27-4	Bromodichloromethane	1200	U
78-87-5	1,2-Dichloropropane	1200	U
10061-01-5	cis-1,3-Dichloropropene	1200	U
79-01-6	Trichloroethene	1200	U
124-48-1	Dibromochloromethane	1200	U
79-00-5	1,1,2-Trichloroethane	1200	U
71-43-2	Benzene	1200	U
10061-02-6	trans-1,3-Dichloropropene	1200	U
75-25-2	Bromoform	1200	U
108-10-1	4-Methyl-2-Pentanone	2500	U
591-78-6	2-Hexanone	2500	U
127-18-4	Tetrachloroethene	1000	J
79-34-5	1,1,2,2-Tetrachloroethane	1200	U
108-88-3	Toluene	1200	U
108-90-7	Chlorobenzene	1200	U
100-41-4	Ethylbenzene	1200	U
100-42-5	Styrene	1200	U
1330-20-7	Xylene (total)	370	J

QUANT REPORT

Operator ID: KAREN
 Output File: >V2331:01
 Data File: >V2331:02
 Name: I3591MS
 Misc: HP5287A 03R12(3435.001.100)P1

Quant Rev: 5
 Injected at: 990419 13:00
 Dilution Factor: 1.00000

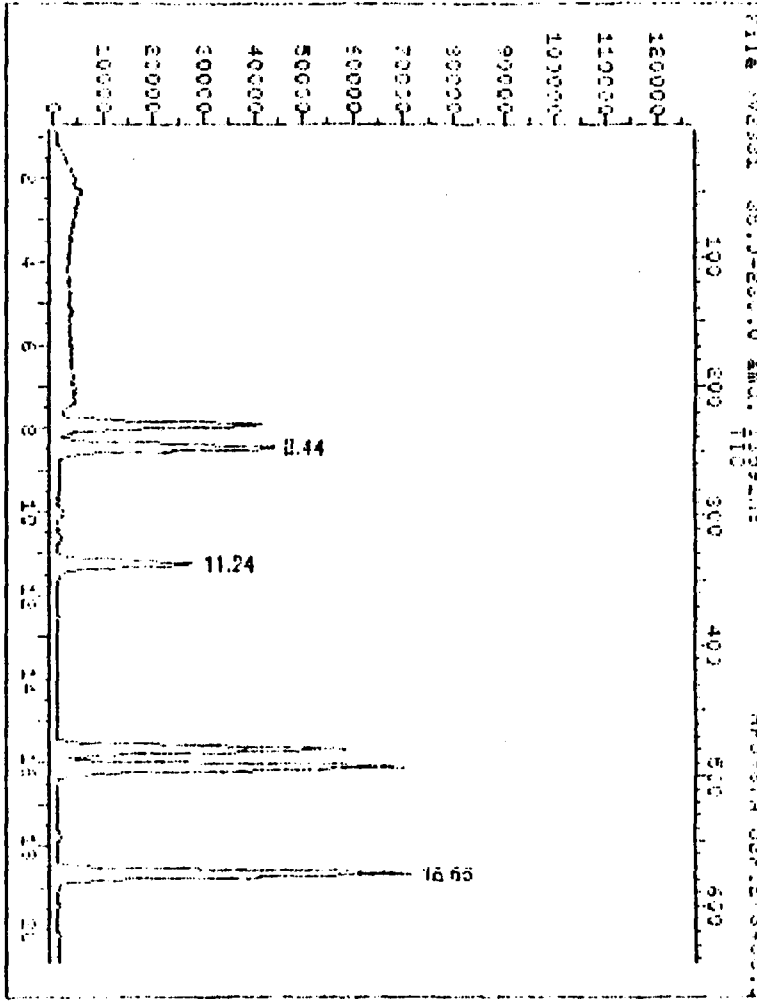
10 FILE: I0VML:EX
 TITLE: CLP VGR ID FILE (PACKED COLUMN)
 Last Calibration: 890419 10:59

Compound	R.T. Min	Area	Conc	Units
1) *Bromochloromethane	8.44	78593	250.00	NG
4) Vinyl Chloride	2.32	5509M	11.00	NS
2) 1,1-Dichloroethane	7.91	105223	254.50	NS
3) 1,2-Dichloroethane (total)	10.05	4195	8.72	NG
Chloroform	10.64	3339	4.50	NG
18) 1,2-Dichloroethane-d4	11.24	93932	213.11	NS
19) *1,4-Difluorobenzene	18.66	365363*	250.00	NS
20) 2-Butanone	11.39	1070	18.39	NG
21) Trichloroethene	15.68	126152	233.35	NS
22) Benzene	16.11	369193M	255.52	NG
23) *Chlorobenzene-d5	23.45	321416	250.00	NS
24) Tetrachloroethene	21.24	9122	21.01	NG
25) Toluene-d8	22.23	366304M	219.81	NG
26) Toluene	22.42	252044	215.00	NS
27) Chlorobenzene	23.57	290115M	229.92	NS
28) Ethylbenzene	25.74	1092	1.52	NS
41) Bromofluorobenzene	27.34	173644	213.91	NS
42) Xylene	29.36	6666	66.66	NS
44) Xylene (total)	29.36	6666M	9.15	NS

* Compound is ISTD

$$\text{Total Xylene} = \frac{6666}{321416} \times \frac{250}{0.69150} \times \frac{10000}{100} \times \frac{1}{4.0010} \times \frac{1}{0.507}$$

$$= 369.63 \text{ } \mu\text{g/kg}$$



Data File: VZ531::02 Quant Output File: VZ531::01

Name: 15591MS

File: HP5987A 08F15 (3435.001.100)P1

ID File: JOURNAL:EE

Title: CLP V06 IC FILE (PACKED COLUMN)

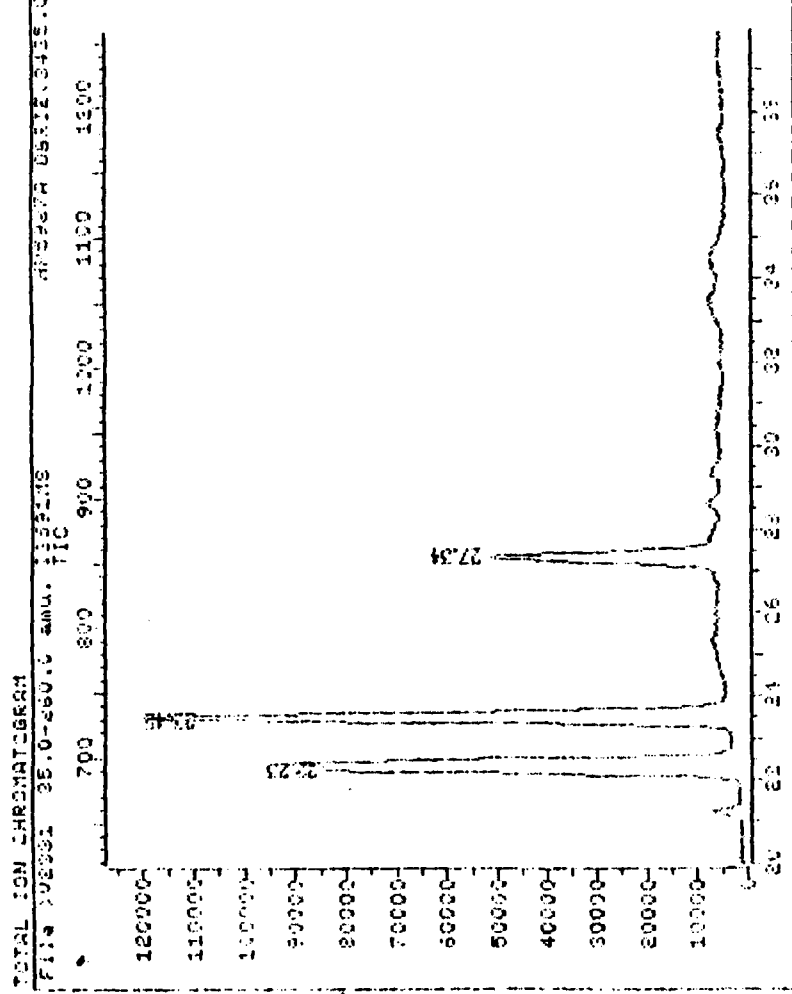
Last Calibration: 890419 10:58

Operator ID: KAREN

Quant Time: 890419 15:45

Injected at: 890419 15:00

TIC page 1 of 2



Date File: >V2331::D2 Quant Output File: ^V2331::D1

Name: 13591MS

MS: HP5987A USBIE(3435.001.100)F1

ID File: IDUNL:EX

Title: CLP VCA ID FILE (PACKED COLUMN)

Last Calibration: 890419 10:58

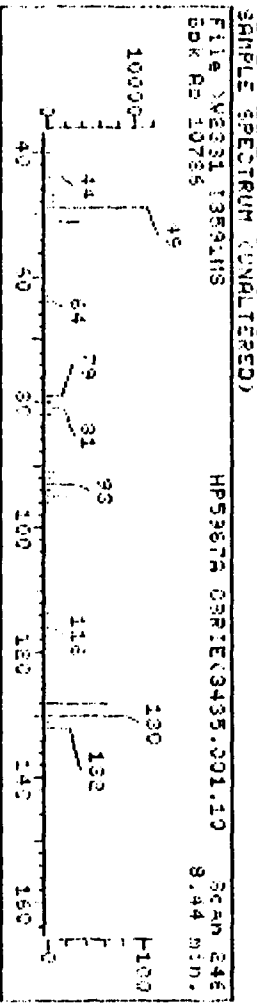
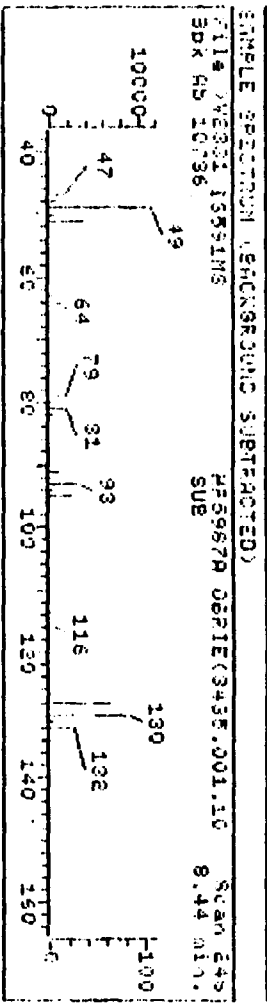
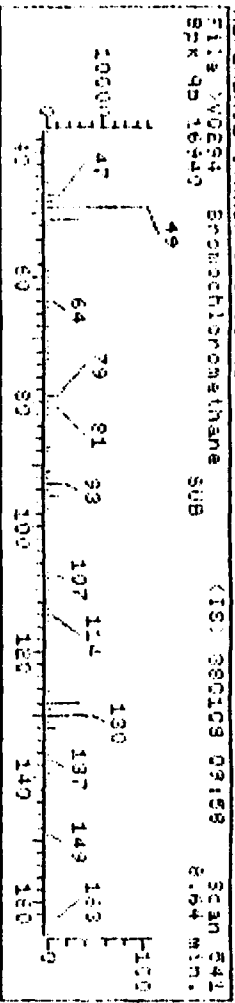
Operator ID: KAREN

Quant Time: 890419 13:45

Injected at: 890419 13:00

TIC page 2 of 2

REFERENCE STANDARD SPECTRUM

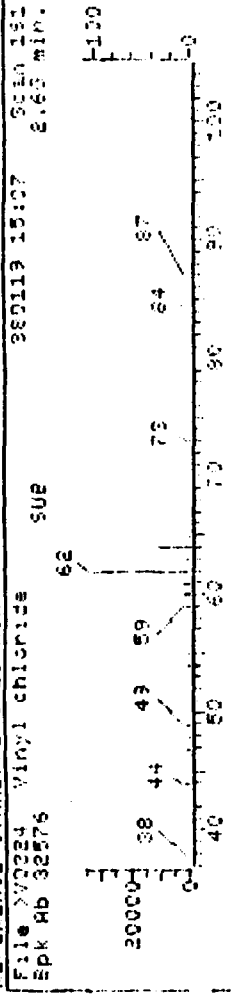


Data File: V02331:02 Quant Output File: V02331:01

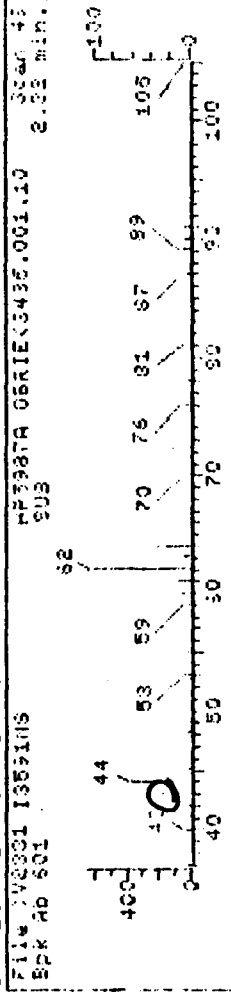
Name: ISSUING
 Mass: HFS967R DBRIE(3435.001.100)P1
 Quant Time: 870419 15:05 Quant ID File: 107ML:67
 Injected at: 870419 15:00 Last Calibration: 870419 10:58

Compound No: 1 (ISTD)
 Compound Name: Bromochloromethane
 Scan Number: 246
 Retention Time: 8.44 min.
 Quant Ion: 228 0
 Area: 78529
 Concentration: 250.00 NG
 n-value: 37

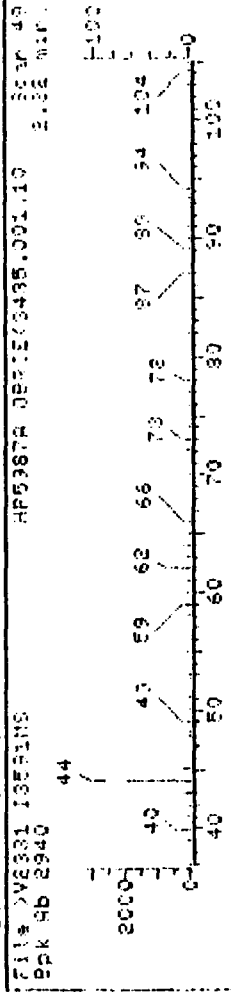
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >V2331:02 . Quant Output File: >V2331:01
 Name: 13591MS
 Misc: HP5987A 08RIE(3435.001.100)P1
 Quant Time: 890417 13:45 Quant IO File: 100ML:EX
 Injected at: 890419 13:00 Last Calibration: 890419 10:50

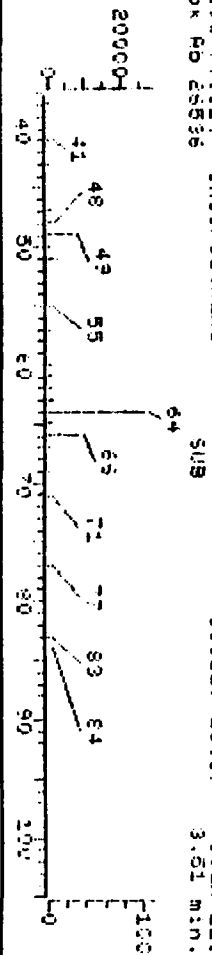
Compound No: 4
 Compound Name: Vinyl Chloride
 Scan Number: 47
 Retention Time: 2.32 min
 Quant Ion: 62.0
 Area: 5509M
 Concentration: 11.00 NG
 q-value: 97

REFERENCE STANDARD SPECTRUM

File: J02324 Chloroethane
Spk No: 5836

300119 15:07

Scan 49
3.61 min.

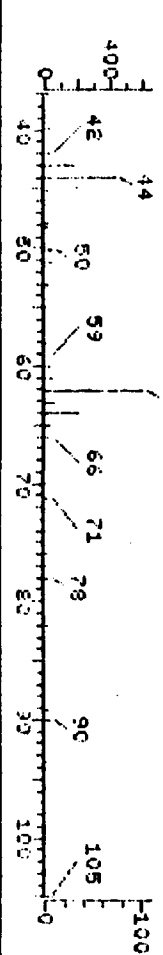


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File: J02331 15691MS
Spk No: 592

HP5967A DBRIE(3435.001.10
SUB

Scan 49
2.32 min.

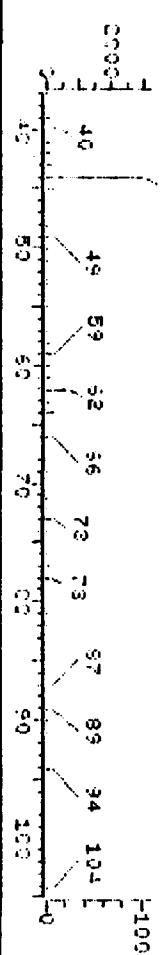


SAMPLE SPECTRUM (UNFILTERED)

File: J02331 10591MS
Spk No: 2940

HP5967A DBRIE(3435.001.10

Scan 49
2.32 min.



Date File: J02331:102

Quant Output File: J02331:102

Name: 15691MS

Mass: HP5967A DBRIE(3435.001.10)P1

Quant Time: 300419 15:45

Quant ID File: 150ML027

Injected at: 890419 15:00

Last Calibration: 890419 10:55

Compound No: 5
 Compound Name: Chloroethane
 Scan Number: 49
 Retention Time: 2.32 min.
 Quant Ion: 64.0
 Area: 1735
 Concentration: 5.22 NG
 q-value: 52

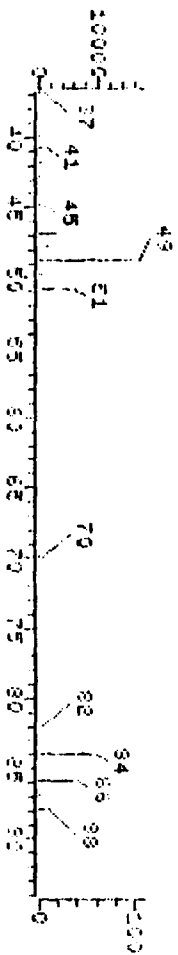
X

REFERENCE STANDARD SPECTRUM

File: 102580 Methylene chloride SUB

385307 11:11

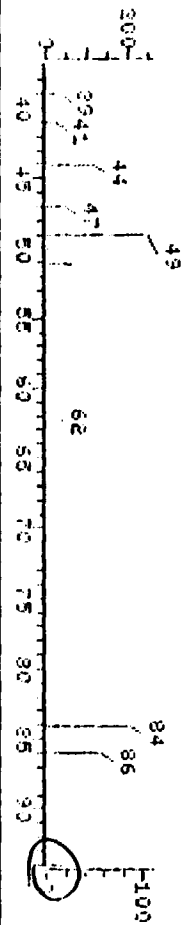
Scan 137
5.05 min.



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File: 102331 13631MS

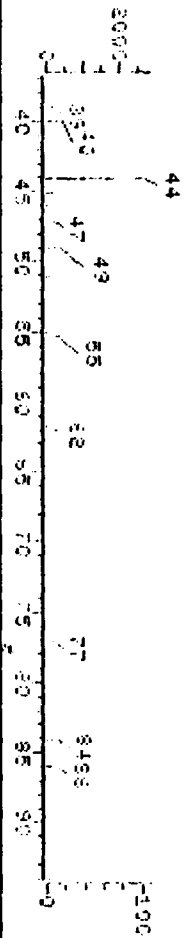
HP5937A 061E(3435.001.10 SUB Scan 148
5.21 min.



SAMPLE SPECTRUM (UNALYSED)

File: 102331 13631MS

HP5937A 061E(3435.001.10 SUB Scan 148
5.21 min.



Data File: 102331:102

Quant Output File: 102331:101

Name: 13631MS

MSID: HP5937A 061E(3435.001.100)P1

Quant Time: 390419 13:45

Quant ID File: 102331:101

Injected at: 890419 13:00

Last Calibration: 890419 10:59

Compound No: 0

Compound Name: Methylene Chloride

Scan Number: 142

Retention Time: 5.21 min.

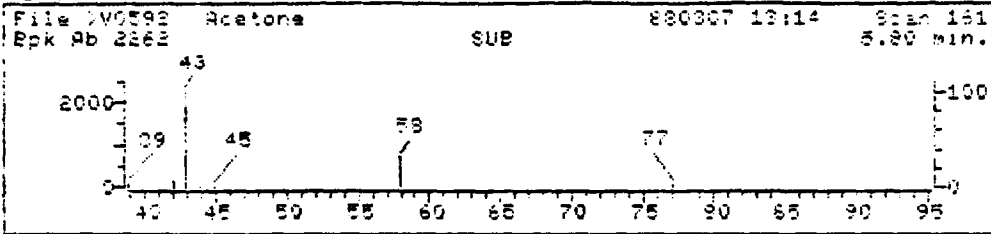
Quant Ion: 84.0

Area: 1890

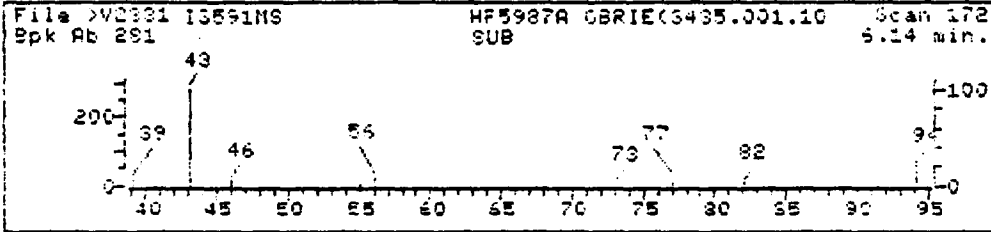
Concentration: 3.71 NG

Q-Value: 82

REFERENCE STANDARD SPECTRUM

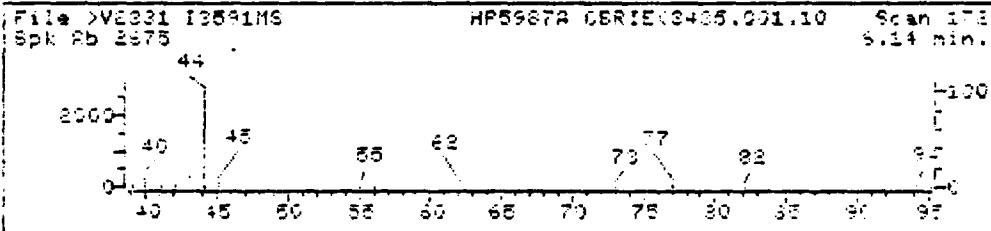


SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



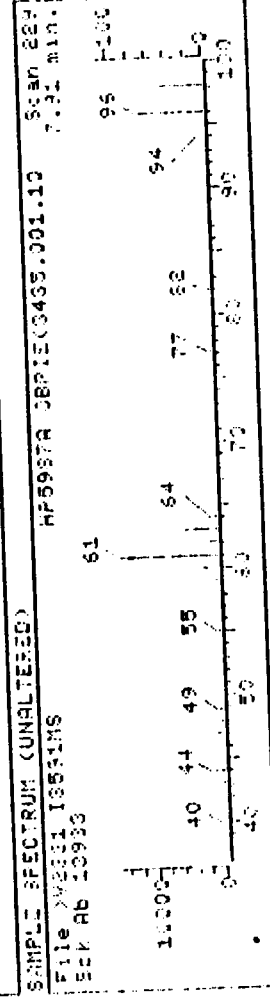
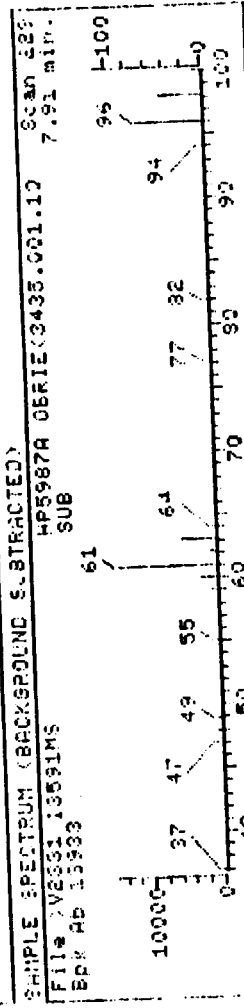
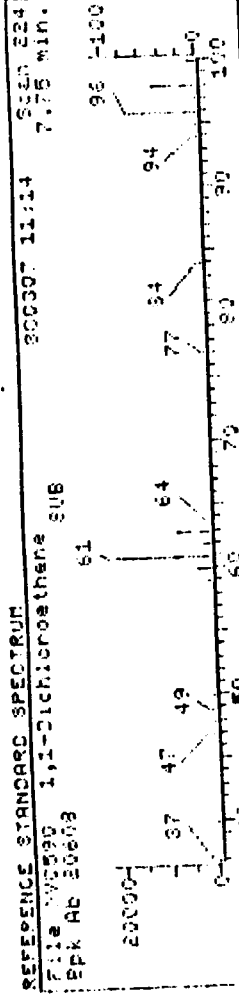
X

SAMPLE SPECTRUM (UNALTERED)



Data File: >V2331::02 Quant Output File: >V2331::0
 Name: 13591MS
 Misc: HP5987A GBRIE(3435.001.10)F1
 Quant Time: 890419 13:45 Quant ID File: IDUML::EX
 Injected at: 890419 13:00 Last Calibration: 890419 10:58

Compound No: 7
 Compound Name: Acetone
 Scan Number: 172
 Retention Time: 6.14 min.
 Quant Ion: 43.0
 Area: 2744M
 Concentration: 18.48 NG
 z-value: 39



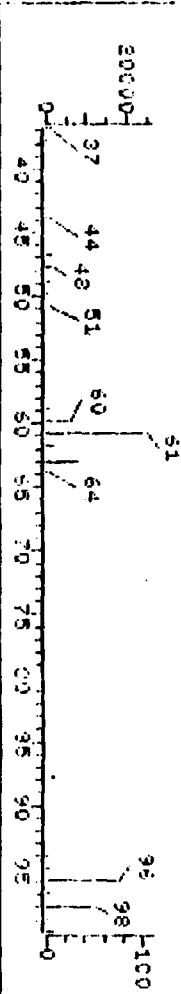
Data File: >V2331:02 Quant Output File: ^V2331:021

Name: 1359IMS
 Misc: HP5987A 08P1E(3435.001.100)P1 Quant ID File: 13591-EX
 Quant Time: 890419 13:45 Last Calibration: 890419 10:30
 Injected at: 890419 13:00

Compound No: 10
 Compound Name: 1,1-Dichloroethene
 Scan Number: 229
 Retention Time: 7.91 min.
 Quant Ion: 96.0
 Area: 105223
 Concentration: 234.60 NG
 Y-value: 96

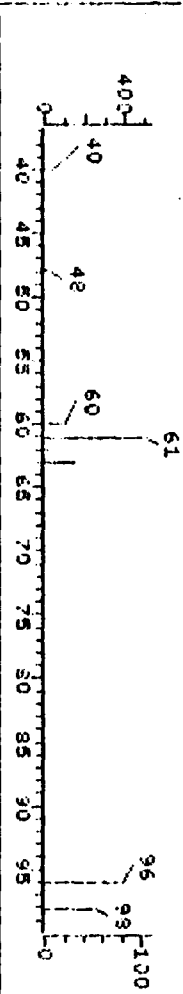
REFERENCE STANDARD SPECTRUM

File: VV0531 cis/trans-1,2-Dichloroethane 820307 12:17 Scan 233
BPK No 23720 SUB 9.77 min.



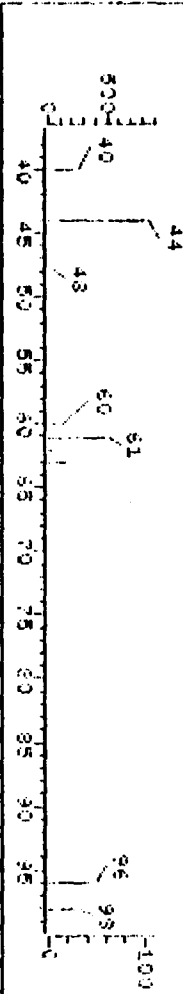
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File: VV2331 1359IMS HPS987A OBRIE(3435.001.10 Scan 233
BPK No 479 SUB 10.05 min.



SAMPLE SPECTRUM (UNALTERED)

File: VV2331 1359IMS HPS987A OBRIE(3435.001.10 Scan 233
BPK No 815 SUB 10.05 min.



Date File: VV2331::02

Quant Output File: VV2331::01

Name: 1359IMS

Misc: HPS987A OBRIE(3435.001.100)P1

Quant Time: 890419 13:45 Quant ID File: 120011:EX

Injected at: 890419 13:00 Last Calibration: 890419 10:58

Compound No: 12

Compound Name: 1,2-Dichloroethane (total)

Scan Number: 233

Retention Time: 10.05 min.

Quant Ion: 96.0

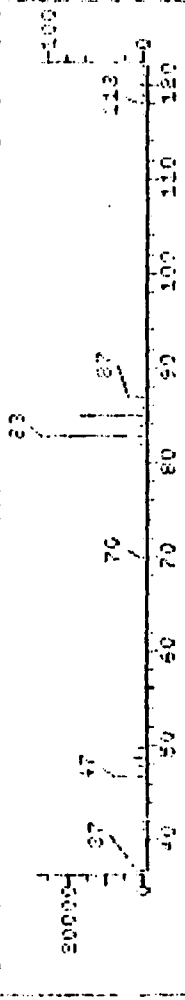
Area: 4195

Concentration: 8.72 NG

q-value: 35

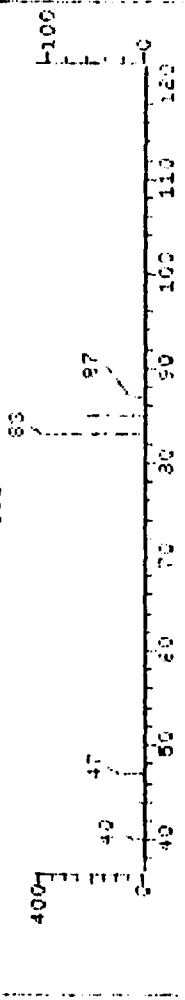
REFERENCE STANDARD SPECTRUM

File: >V2331 13592MS Chloroform SUB 680307 11:11 317 Scan 317
 Bck Ab 26456 10:54 min.



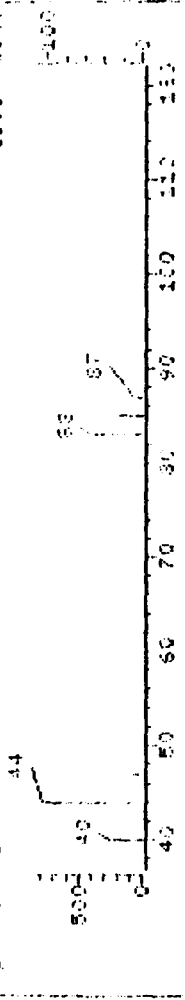
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File: >V2331 13592MS HP2987A C6R1E(3435.001.10) Scan 317
 Bck Ab 371 10:54 min.



SAMPLE SPECTRUM (UNFILTERED)

File: >V2331 13592MS HP2987A C6R1E(3435.001.10) Scan 317
 Bck Ab 248 10:54 min.



Case File: >V2331:102

Quant Output File: V2331:101

Name: 13592MS

File: HP2987A C6R1E(3435.001.100)P1

Quant Time: 090419 13:45

Quant IO File: 10101:EX

Injected at: 090419 13:00

Last Calibration: 090419 10:50

Compound No: 13

Compound Name: Chloroform

Scan Number: 317

Retention Time: 10.64 min.

Quant Ion: 83.0

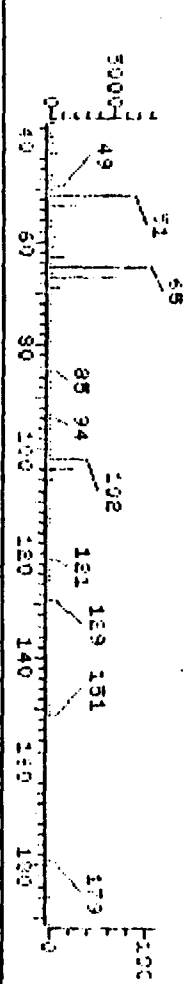
Area: 3855

Concentration: 4.50 NG

Value: 75

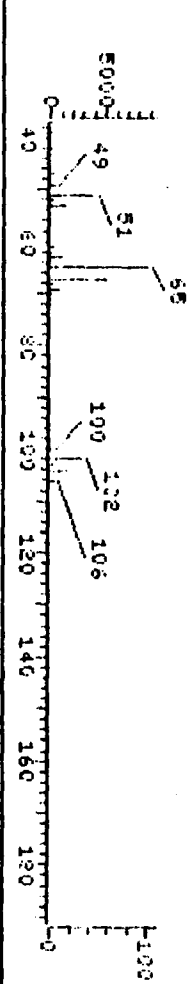
REFERENCE STANDARD SPECTRUM

File: \MSDC31 1.2-Dichloroethane-d4 (GURR) 08100 09:58 Scan 716
 Pk Ab 8529 SUB 11.24 min.



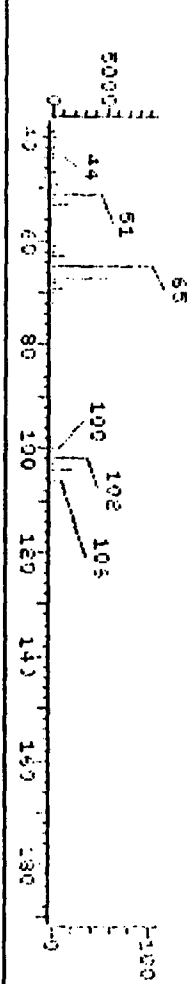
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File: \MSDC31 1289IMS HP5987A 08RIE(3435.001.10 Scan 336
 Pk Ab 8592 SUB 11.24 min.



SAMPLE SPECTRUM (UNFILTERED)

File: \MSDC31 1389IMS HP5987A 08RIE(3435.001.10 Scan 336
 Pk Ab 8592 SUB 11.24 min.



Data File: \023531:1:02

Quant Output File: \023531:1:01

Name: 1359IMS

Misc: HP5987A 08RIE(3435.001.100)P1

Quant Time: 890419 15:45

Quant ID File: 10UMI:1EK

Injected at: 890419 15:00

Last Calibration: 890419 10:50

Compound No: 15

Compound Name: 1,2-Dichloroethane-d4

Scan Number: 336

Retention Time: 11.24 min.

Quant Ion: 55.0

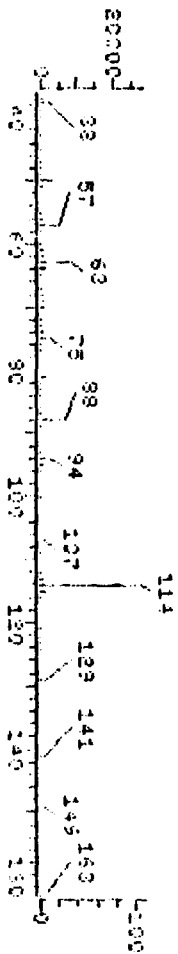
Area: 98982

Concentration: 215.11 NG

q-value: 85

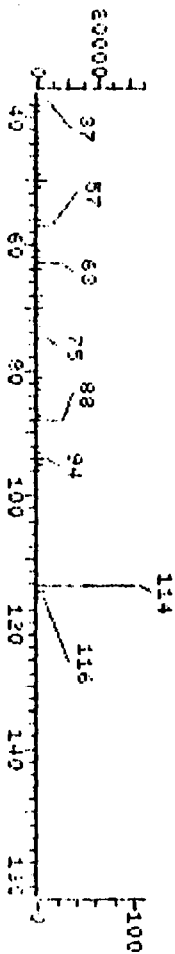
PURCHASE STANDARD SPECTRUM

File Name: 1,4-Difluorobenzene SUB (15) 366138 09:58 13.66 min. 18.66 min.



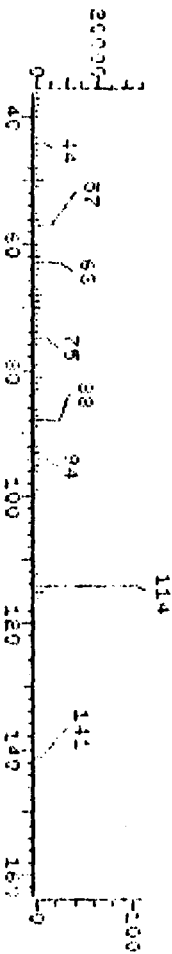
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File Name: H2591MS 13691MS H25967A 08FIE(3435.001.10) 13.66 min. 18.66 min. 18.66 min.



SAMPLE SPECTRUM (UNALTERED)

File Name: H2591MS 13691MS H25967A 08FIE(3435.001.10) 13.66 min. 18.66 min.



Data File: H2591:02

Quant Output File: H2591:01

Name: 15691MS

Misc: H25967A 08FIE(3435.001.10)P1

Quant Time: 890419 15:45

Quant ID File: 100001:EX

Injected at: 890419 15:00

Last Calibration: 890419 10:58

Compound No: 18 (1STD)

Compound Name: 1,4-Difluorobenzene

Scan Number: 575

Retention Time: 13.66 min.

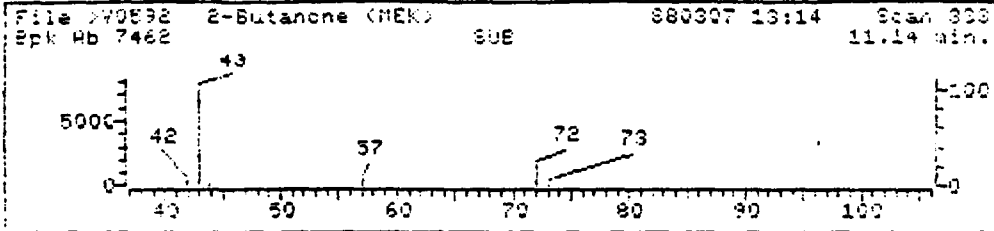
Quant Ion: 114.0

Area: 363562M

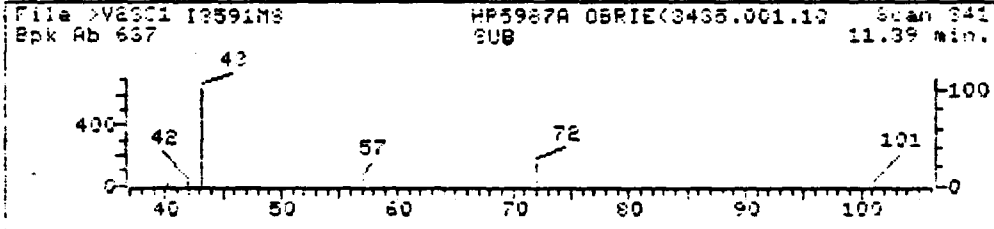
Concentration: 250.00 NG

g-value: 100

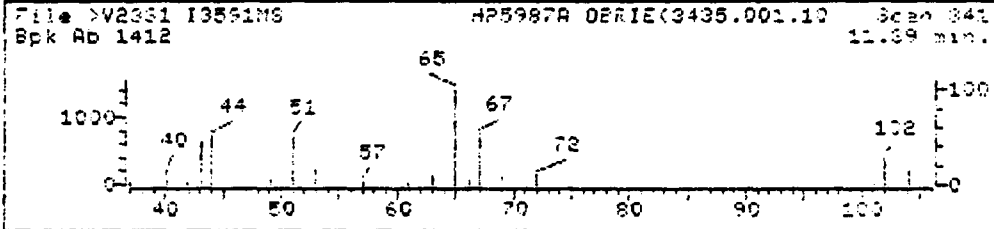
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >V2331::D2 Quant Output File: ^V2331::D1
 Name: I3591MS
 Misc: HP5987A DBRIE(3435.001.100)P1
 Quant Time: 890419 13:45 Quant ID File: ISIDL::01
 Injected at: 890419 13:00 Last Calibration: 890419 10:30

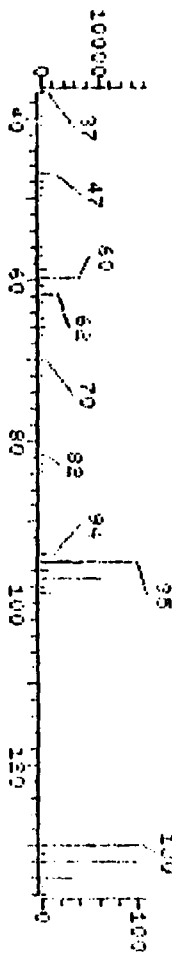
Compound No: 19
 Compound Name: 2-Butanone
 Scan Number: 341
 Retention Time: 11.39 min.
 Quant Ion: 72.0
 Area: 1070
 Concentration: 18.09 MG
 q-value: 96

REFERENCE STANDARD SPECTRUM

File: \V02590 Trichloroethane SUB

880307 11:14

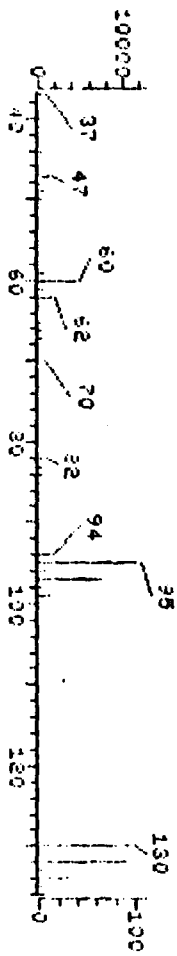
Scan 471
15.43 min.



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File: \V02591 13591MS HP6987A CARIE(3435.001.10 SUB

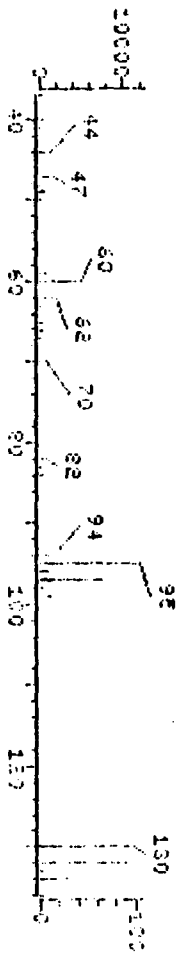
Scan 475
15.56 min.



SAMPLE SPECTRUM (UNFILTERED)

File: \V02591 13591MS HP6987A CARIE(3435.001.10

Scan 479
15.63 min.



Data File: \V02591:102

Quant Output File: \V02591:101

Name: 13591MS

Misc: HP5987A CARIE(3435.001.100)P1

Quant Time: 890419 13:45

Quant ID File: 13591:101

Injected at: 890419 13:00

Last Calibration: 890419 10:15

Compound No: 26

Compound Name: Trichloroethane

Scan Number: 479

Retention Time: 15.62 min.

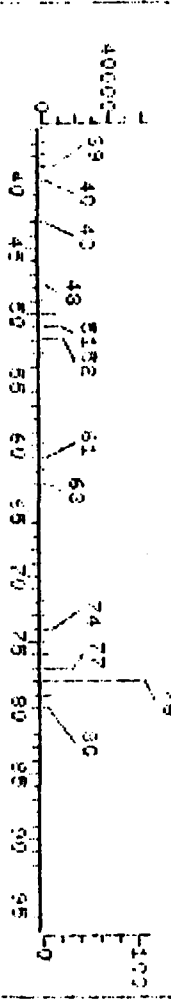
Quant Ion: 120.10

Area: 126158

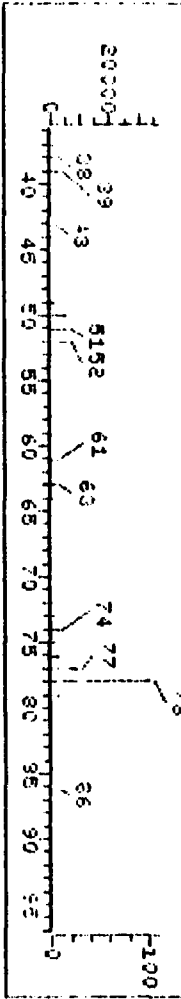
Concentration: 236.95 NG

f-value: 98

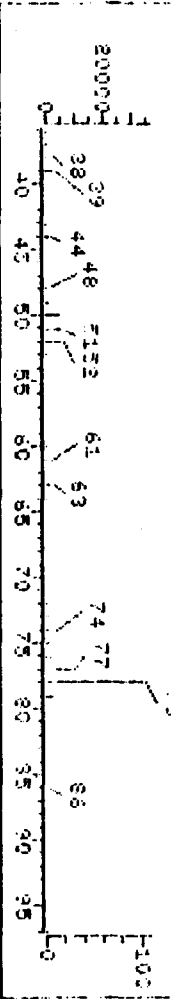
REFERENCE STANDARD SPECTRUM
File: V0231 Benzene SUB 890419 12:17 Scan 486
Exp No: 87664 15.83 min.



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)
File: V0231 I359IMS HP0987A 08RIE(3435.001.10 Scan 450
Exp No: 88184 SUB 890419 15:11 min.



SAMPLE SPECTRUM (UNALTERED)
File: V0231 I359IMS HP0987A 08RIE(3435.001.10 Scan 498
Exp No: 88184 SUB 890419 15:11 min.

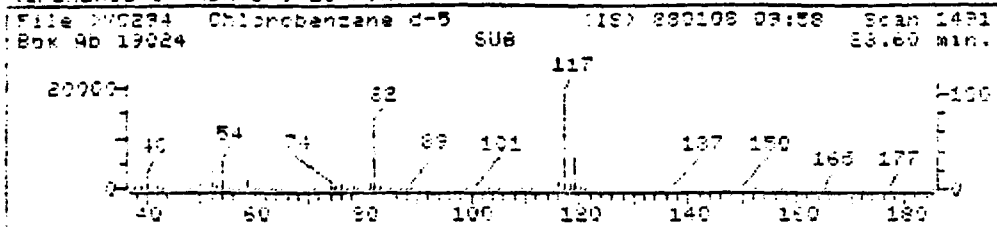


Data File: V02331:02 Quant Output File: V02331:01

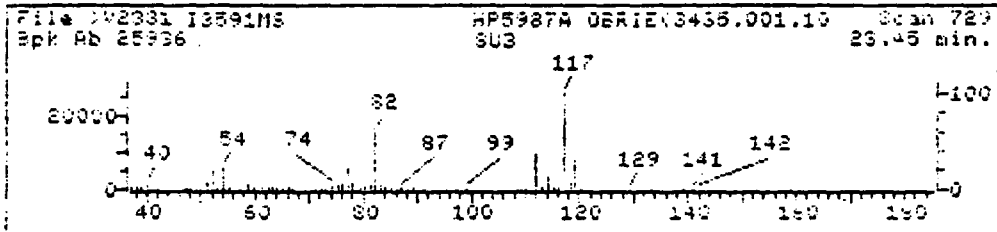
Name: I359IMS
Misc: HP0987A 08RIE(3435.001.100)P1 Quant ID File: I0VME:03
Quant Time: 890419 15:45 Last Calibration: 890419 10:56
Injected at: 890419 15:00

Compound No: 27
Compound Name: Benzene
Scan Number: 493
Retention Time: 15.11 min.
Quant Ion: 78.0
Area: 369193M
Concentration: 255.52 NG
q-value: 100

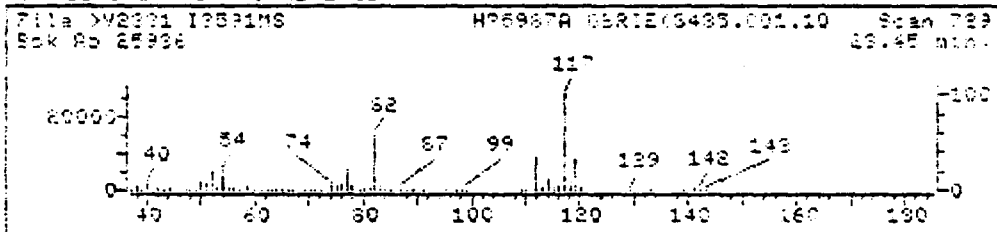
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >V2331:1D2

Quant Output File: >V2331:1D1

Name: I3591MS

Misc: HP5987A OBRIE(3435.001.100)P1

Quant Time: 890419 13:45

Quant ID File: IDVNL:1EX

Injected at: 890419 13:00

Last Calibration: 890419 10:53

Compound No: 32 (ISTD)

Compound Name: Chlorobenzene-d5

Scan Number: 729

Retention Time: 23.45 min.

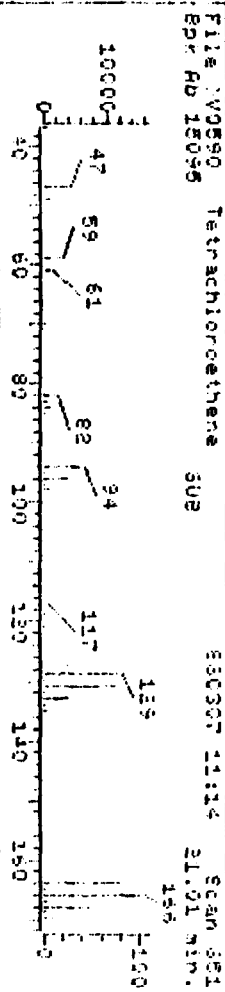
Quant Ion: 117.0

Area: 321416

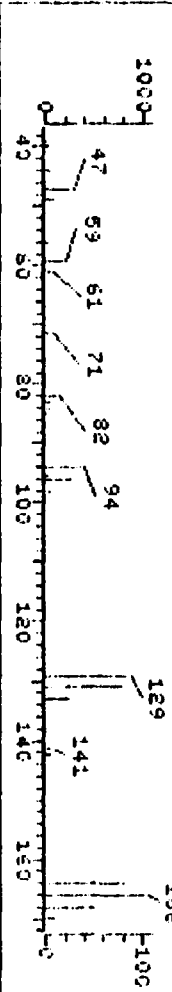
Concentration: 250.00 NG

q-value: 97

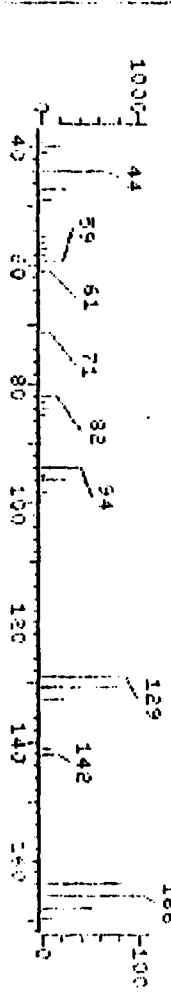
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)
 File: V0831 1559IMS HPS937A 08RIE(5435.001.10) Scan 558
 BpK Hr 985 SUB 21.02 min. 156



SAMPLE SPECTRUM (UNALTERED)
 File: V0831 1559IMS HPS937A 08RIE(5435.001.10) Scan 553
 BpK Hr 985 21.02 min. 156



Data File: VU23531::02 Quant Output File: VU23531::01

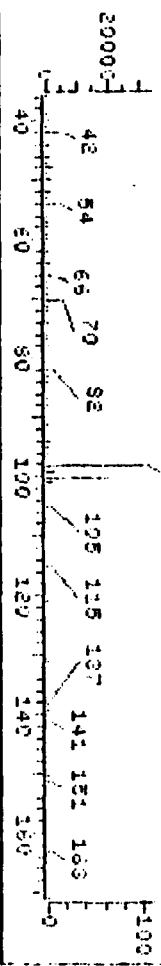
Name: 1359IMS
 Hisc: HPS937A 08RIE(5435.001.100)P1 Quant IO File: 109ML:01
 Quant Time: 890419 15:45 Last Calibration: 890419 10:51
 Injected at: 890419 13:00

Compound No: 55
 Compound Name: Tetrachloroethene
 Scan Number: 658
 Retention Time: 21.24 min.
 Quant Ion: 164.0
 Area: 9122
 Concentration: 21.02 NG
 g-value: 90

REFERENCE STANDARD SPECTRUM

File: \V0284 Toluene d-8
Spk No: 30380

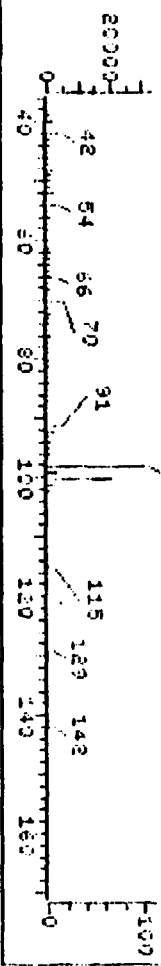
SUB (SURE) 377108 09:59 53.30 1414
22.83 min.



SAMPLE SPECTRUM \BROK:GROUND SUBTRACTED)

File: \V02331 13551MS
Spk No: 30388

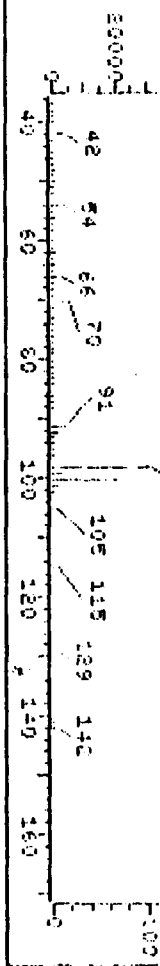
MP5987A 08RIE(3435.001.10
SUB 58 22.83 min.



SAMPLE SPECTRUM (UNALTERED)

File: \V02331 13551MS
Spk No: 30384

MP5987A 08RIE(3435.001.10
SUB 58 22.83 min.



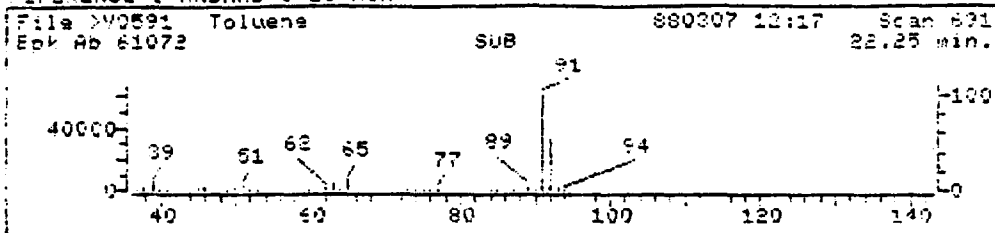
Data File: \V02331::D2

Quant Output File: \V02331::D1

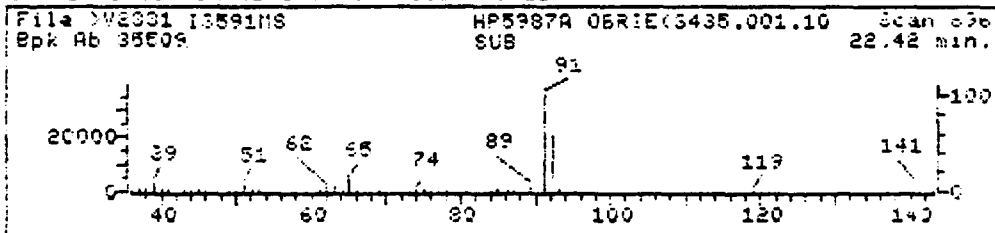
Name: 13591MS
Misc: MP5987A 08RIE(3435.001.100)P1
Quant Time: 890419 13:45
Injected at: 890419 13:00
Quant ID File: 10UMPL:EX
Last Calibration: 890419 10:56

Compound No: 37
Compound Name: Toluene-d8
Scan Number: 690
Retention Time: 22.23 min.
Quant Ion: 59.0
Area: 366824M
Concentration: 219.81 NG
g-value: 100

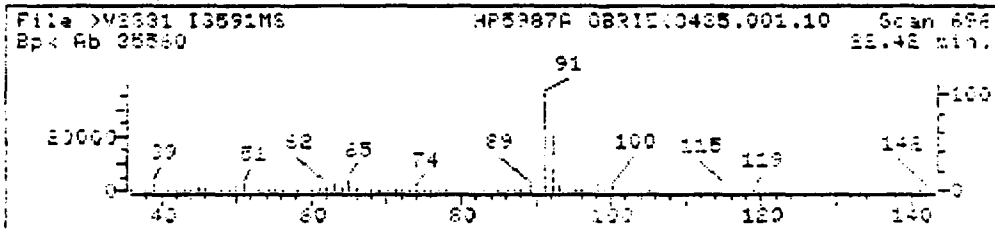
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



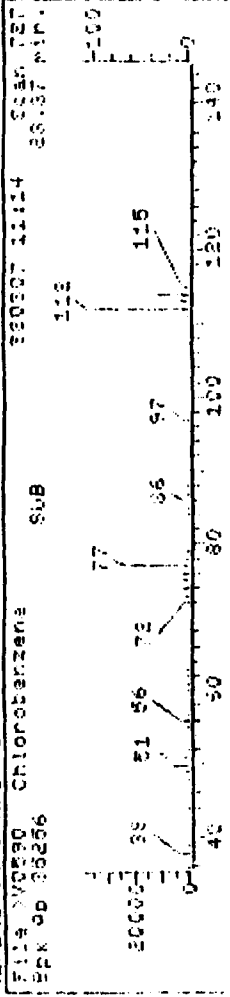
SAMPLE SPECTRUM (UNALTERED)



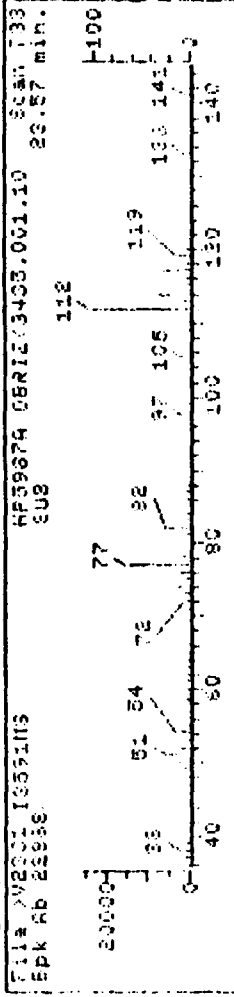
Data File: >02531::D2 Quant Output File: >02531::D1
 Name: I3591MS
 Misc: HP5987A DBRIE(3435.001.100)P1
 Quant Time: 890419 13:45 Quant ID File: IDUNT::17
 Injected at: 890419 13:00 Last Calibration: 890419 10:58

Compound No: 55
 Compound Name: Toluene
 Scan Number: 696
 Retention Time: 22.42 min.
 Quant Ion: 92.0
 Area: 252244
 Concentration: 245.00 NG
 q-value: 96

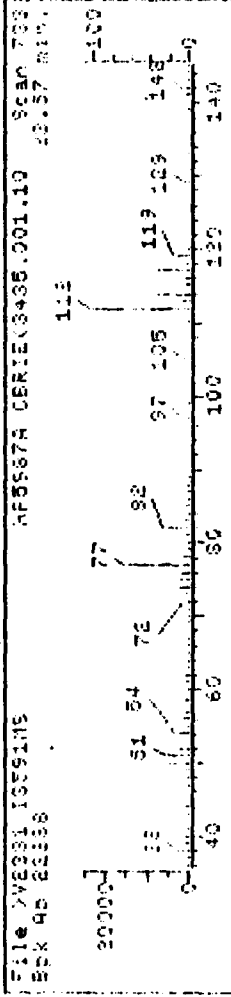
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >V2331:02

Quant Output File: ^V2331:01

Name: 13591NS

Misc: AF5987A DBRIE(3435.001.10)P1

Quant Time: 690419 13:45

Quant ID File: IDUML:EX

Injected at: 890419 13:00

Last Calibrator: 890419 10:58

Compound No: 39

Compound Name: Chlorobenzene

Scan Number: 733

Retention Time: 23.57 min.

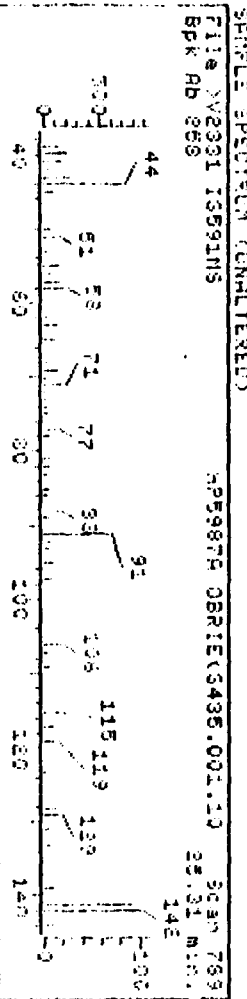
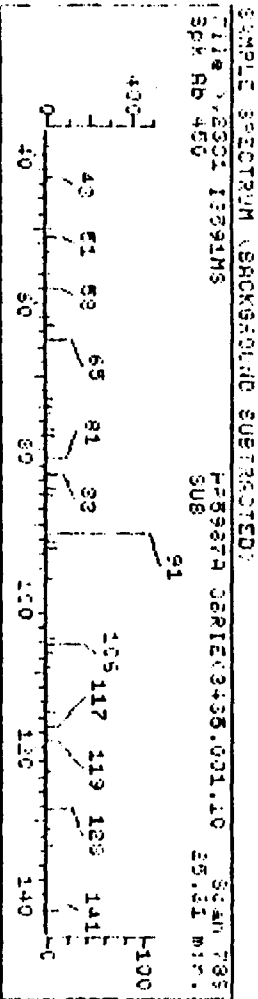
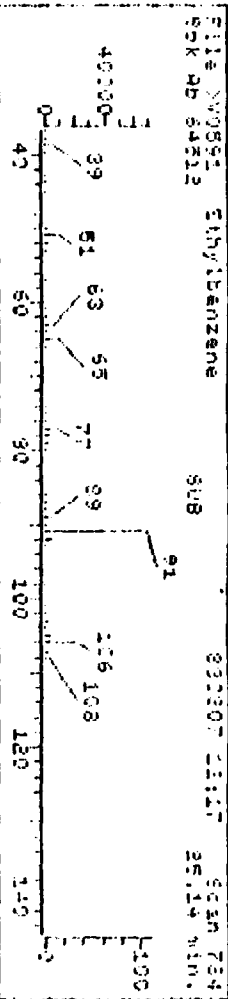
Quant Ion: 112.0

Area: 230715N

Concentration: 229.92 NG

q-value: 99

REFERENCE STANDARD SPECTRUM

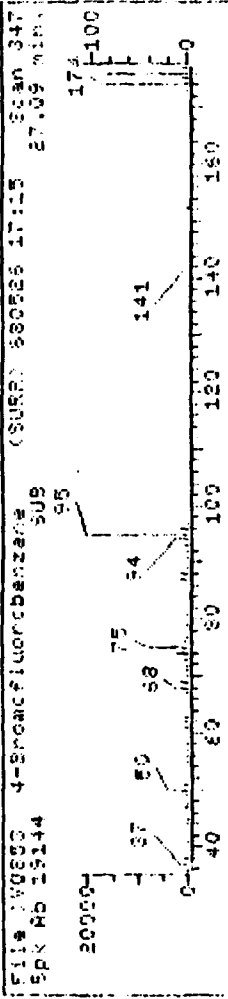


Data File: X02331:102 Quant Output File: X02331:101

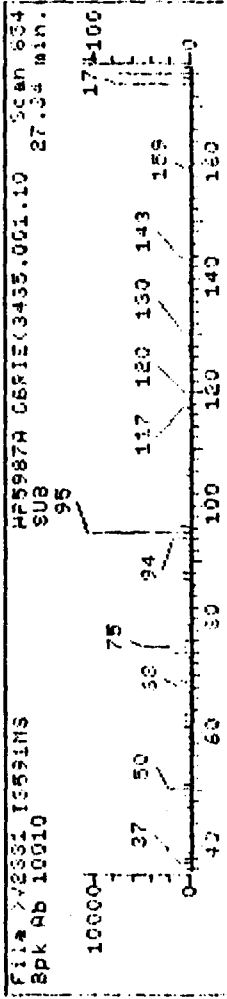
Name: 15591MS
 Misc: HFS987A DBRIE(3435.001.100)P1
 Quant ID File: 10UNALTE:53
 Quant Time: 890419 15:45
 Injected at: 890419 15:00
 Last Calibration: 890419 10:58

Compound No: 40
 Compound Name: Ethylbenzene
 Scan Number: 785
 Retention Time: 25.31 min.
 Quant Ion: 106.0
 Area: 1990
 Concentration: 3.27 NG
 q-value: 92

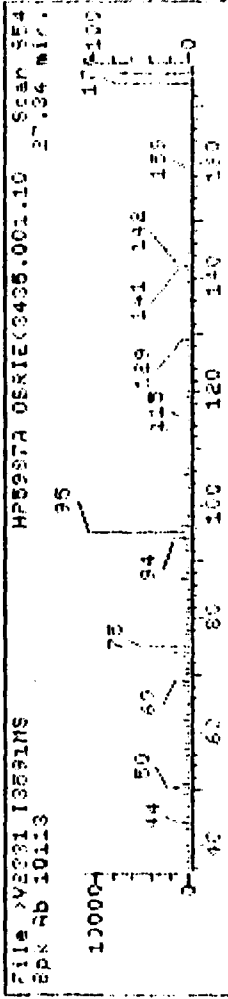
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Date File: >V2331:02 Quant Output File: ^V2331:01
 Name: 1359IMS
 Misc: HP5987A 08RIE(3435.001.100)P1 Quant ID File: IDUML:EX
 Quant Time: 890419 13:45 Last Calibration: 890419 10:58
 Injected at: 890419 13:00

Compound No: 41
 Compound Name: Bromofluorobenzene
 Scan Number: 854
 Retention Time: 27.34 min.
 Quant Ion: 95.0
 Area: 173644
 Concentration: 213.9: NG
 F-value: 99

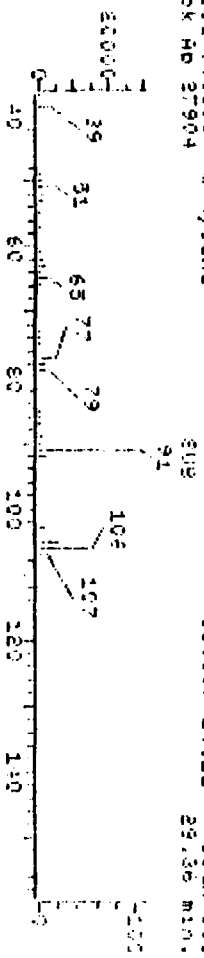
REFERENCE STANDARD SPECTRUM

File: 000293
SCK No: 27904

m-Xylene

000207 14:12

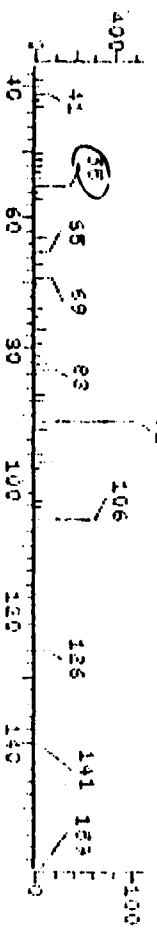
05:30 03
29:58 min.



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File: 002331 13591MS
SCK No: 481

HP5987A DBP1E(3435.001.10) SUB
05:30 03
29:58 min.



SAMPLE SPECTRUM (UNALTERED)

File: 002331 13591MS
SCK No: 670

HP5987A DBP1E(3435.001.10) SUB
05:30 03
29:58 min.



*made
reference*

Meta File: 002331:02

Quant Output File: 002331:01

Name: 13591MS

NISo: HP5987A DBP1E(3435.001.100)P1

Quant Time: 890419 15:45

Quant ID File: 00001:01

Injected at: 890419 15:00

Last Calibration: 890419 10:58

Compound No: 45

Compound Name: m-Xylene

Scan Number: 994

Retention Time: 23.53 min.

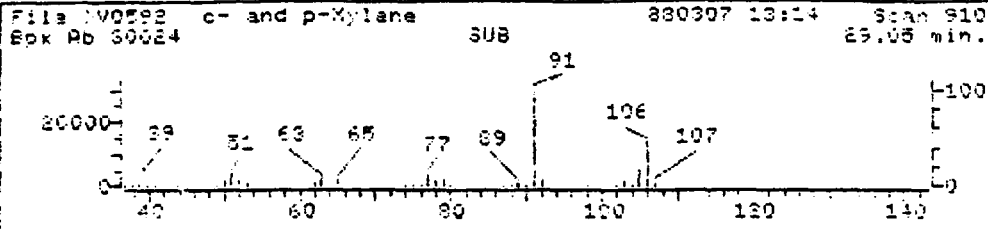
Quant Ion: 106.0

Area: 4769

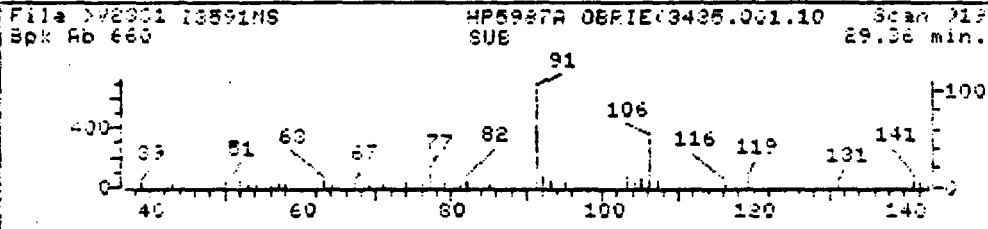
Concentration: 5.57 NG

q-value: 86

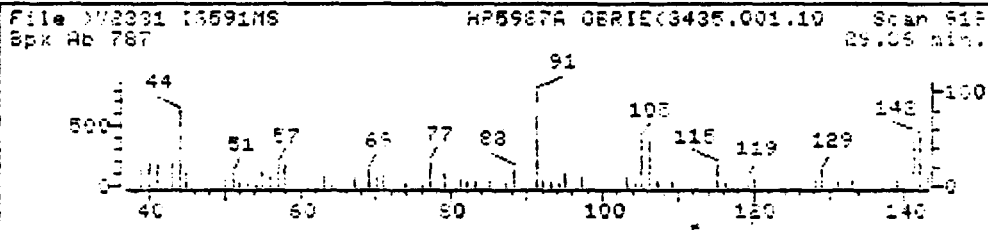
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Date File: >V2331::D2

Quant Output File: ^V2331::D1

Name: 1359IMS

Misc: HP5987A GRIE(3435.001.100)P1

Quant Time: 890419 13:45

Quant ID File: IDUML:EX

Injected at: 890419 13:00

Last Calibration: 890419 10:58

Compound No: 44

Compound Name: Xylene (total)

Scan Number: 919

Retention Time: 29.36 min.

Quant Ion: 106.0

Area: 6665M

Concentration: 9.18 NG

c-value: 93

Matrix Spike Duplicate

REPORT: LABREN
 File: A025521:01
 File: X02352:02
 15091400
 H55927A OSRIE(5435.001.100).PI

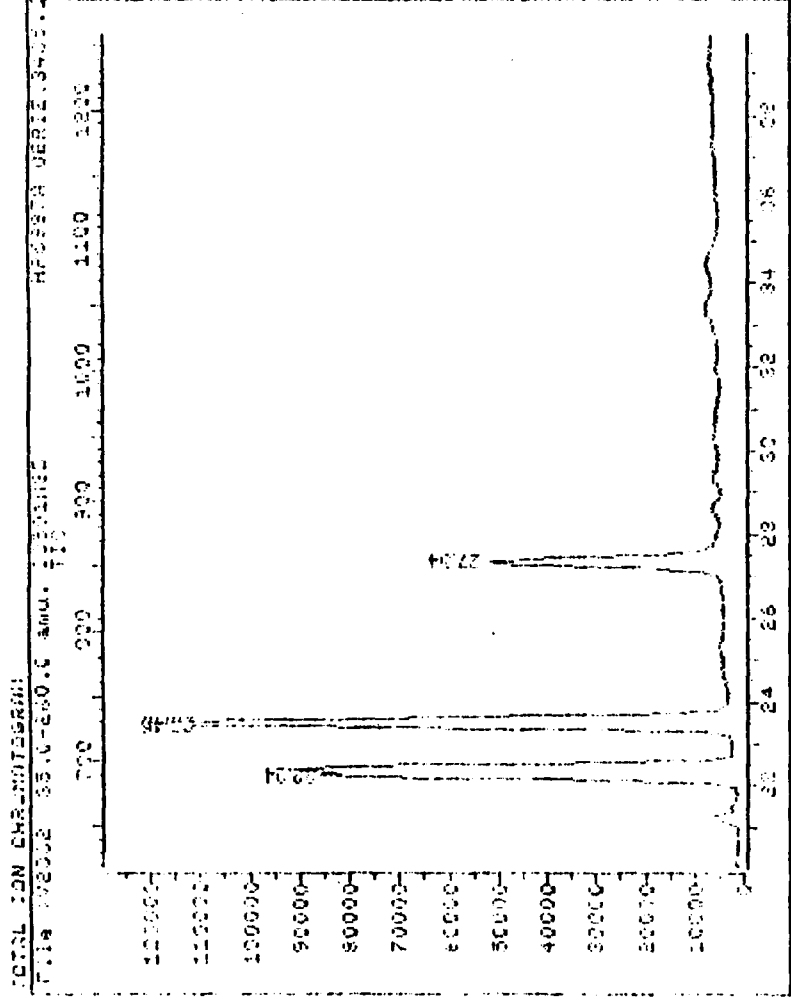
Quant Rev: 0
 Injected at: 990419 17:57
 Dilution Factor: 1 0000

File: A025521:01 (PACKET COLUMN)
 Calibration: 990419 10:58

Compound	R.T.	Area	Conc	Units
Bromochloromethane	8.48	128.0	250.00	NG
Vinyl Chloride	2.32	42.0	11.55	NG
1,1-Dichloroethene (total)	7.92	96.0	232.77	NG
1,2-Dichloroethene (total)	10.06	96.0	8.57	NG
1,2-Dichloroethene-d4	11.22	65.0	212.75	NG
1,2-Difluorobenzene	18.55	114.0	250.00	NG
1,4-Difluorobenzene	11.40	72.0	24.59	NG
n-Butanone	15.08	130.0	127.00	NG
Trichloroethene	16.12	78.0	250.00	NG
Benzene	23.45	117.0	17.72	NG
*Chlorobenzene-d5	21.21	164.0	215.08	NG
*Chlorobenzene	22.24	98.0	242.91	NG
Toluene-d8	22.45	92.0	254.25	NG
Toluene	23.55	112.0	254.25	NG
Chlorobenzene	27.34	93.0	215.41	NG
Bromofluorobenzene	27.42	107.0	215.41	NG
Xylene (total)	29.57	106.0	315.46	NG

* Compound is ISTD

$$\begin{aligned}
 \text{Total Xylene} &= \frac{6548}{330984} \times \frac{250}{0.69150} \times \frac{1}{4.0171} \times \frac{1}{0.507} \times \frac{10000}{100} \\
 \text{Total Xylene} &= 351.18 \text{ ug/kg}
 \end{aligned}$$



Data File: 890419.D1 Quant Output File: 890419.D1
 Name: 1993IMP1

File: HP5987A.DSRIE(7435.001.100)P1

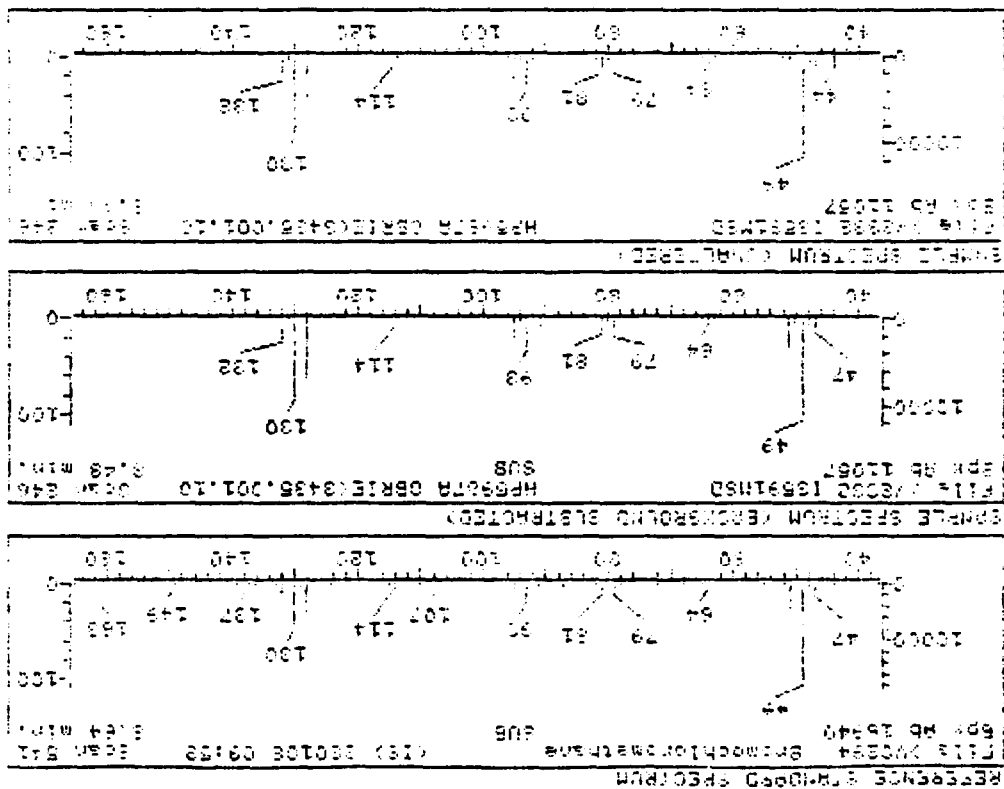
IO File: ADJUL:EX
 File: CLR VCH ID FILE (PACKED COLUMNS)
 Last Calibration: 890419 10:56

Operator ID: KAREN
 Quant Time: 890419 14:43
 Injected at: 890419 13:58

TIC page 2 of 2

Compound No: 1 (1810)
 Compound Name: Bromochloromethane
 Scan Number: 148
 Retention Time: 8.48 min.
 Queue Index: 128 0
 Date: 000174
 Concentration: 210.00 mg
 Injection: 98

Base File: 022522:102
 Quant Output File: 022522:101
 Name: 1022525
 Inj: HPLC01A.D (555.001,100) 21
 Run Time: 000419 13:48
 Injected at: 000419 13:58
 Last Calibration: 000119 10:50



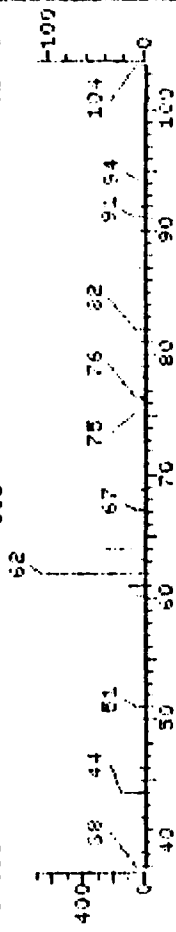
REFERENCE STANDARD SPECTRUM

FILE #V0384 VINYL CHLORIDE SUB 890119 15:07 SCAN 48
 PK AB 12575 2.65 min.



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

FILE #V0302 13591MSD HP5987A DBRIE(3435.001.10) SUB 890419 14:43
 PK AB 533 2.32 min.



SAMPLE SPECTRUM (UNALTERED)

FILE #V0302 13591MSD HP5987A DBRIE(3435.001.10) SUB 890419 14:43
 PK AB 2754 2.32 min.



data File: >VZ332:02 Quant Output File: >Z332:01
 Name: 13591MSI
 Mass: HP5987A DBRIE(3435.001.100)P1 Quant ID File: 100PL:5K
 Quant Time: 890419 14:43 Last Calibration: 890419 10:54
 Injected at: 890419 13:56

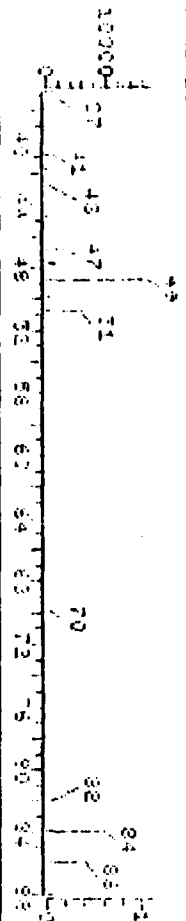
Compound No: 4
 Compound Name: Vinyl Chloride
 Scan Number: 48
 Retention Time: 2.32 min.
 Quant Ion: 62.0
 Area: 5909
 Concentration: 11.55 NG
 q-value: 89

REFERENCE STANDARD SPECTRUM

FILE: 00550 METHYLENE CHLORIDE SUB

800307 11:14

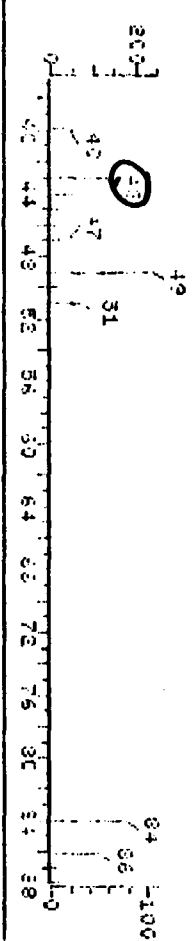
SCAN: 137
5.18 MIN.



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

FILE: 00552 10551MSD

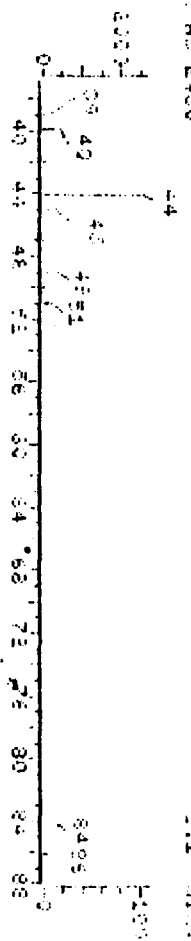
HP5987A DEPIE(3495.001.10) 5.18 MIN.
SUB



SAMPLE SPECTRUM (UNFILTERED)

FILE: 00552 10551MSD

HP5987A DEPIE(3495.001.10) 5.18 MIN.
SUB



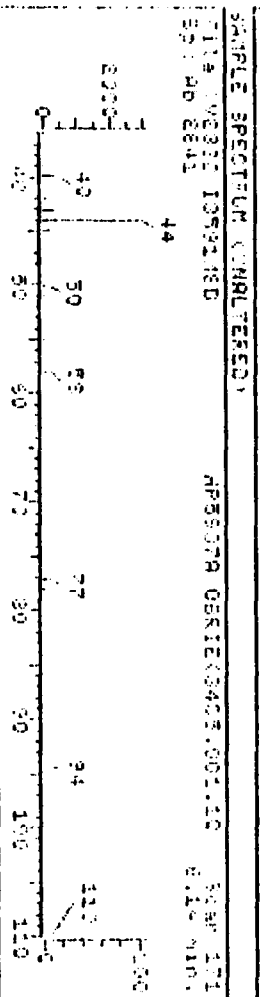
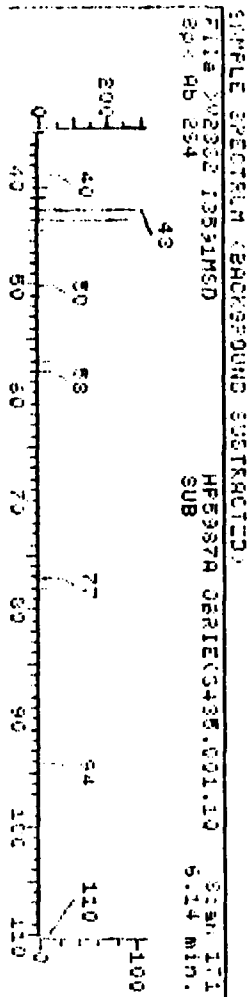
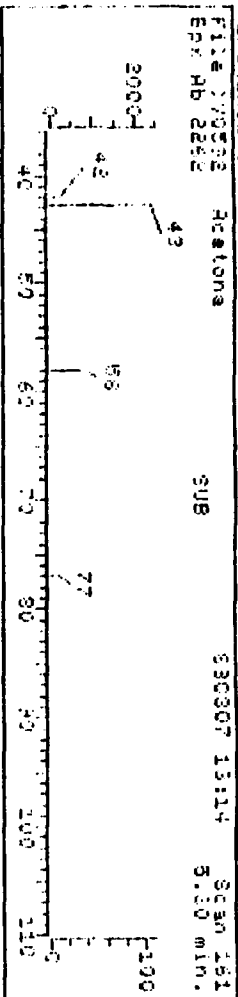
Quant Output File: 00552 01

Date File: 002332:102
 Name: 10591MSD
 Disc: H05987A DEPIE(3495.001.100)P1
 Quant Time: 870419 14:45
 Injected at: 870419 13:56
 Quant ID File: 180111EN
 Last Calibration: 870419 17:58

Compound No: 5
 Compound Name: Methylene Chloride
 Scan Number: 140
 Retention Time: 5.18 min.
 Quant Ion: 84.0
 Count: 1597
 Concentration: 5.06 mcg
 S-value: 92

X

REFERENCE STANDARD SPECTRUM



Meta File: 202332:02 Quant Output File: 202332:01
 Name: 15571MSD
 Mass: HFE937A OERIE(2435.001.10) 1
 Quant Time: 890419 14:43 Quant II File: 10531MSD
 Injected at: 890419 13:56 Last Calibration: 890419 10:58

Compound No: 7
 Compound Name: Acetone
 Scan Number: 171
 Retention Time: 6.14 min.
 Quant Ion: 43.0
 Area: 2318
 Concentration: 19.56 NG
 q-value: 61

X

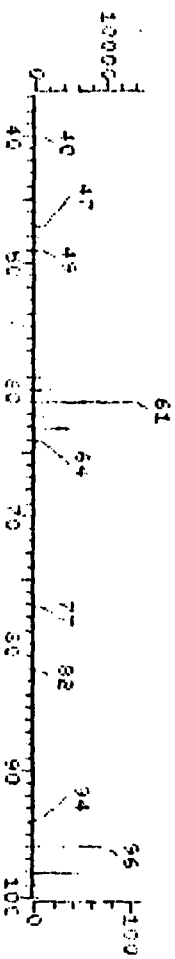
REFERENCE STANDARD SPECTRUM

File: V06892 1,1-Dichloroethane SUB 300907 11:14 SCAN 224
PK AB 185820 7.92 min.



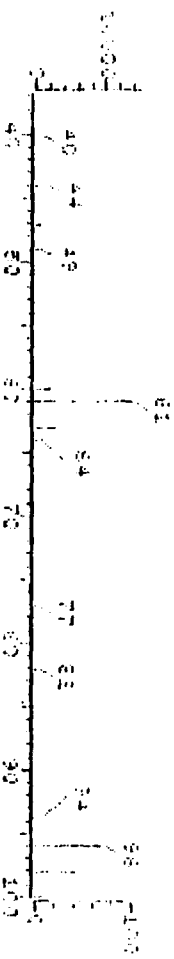
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File: V06892 I05941MSD HFS987A GR1E(3435.001.10 SCAN 223
PK AB 185820 SUB 300907 11:14 7.92 min.



SAMPLE SPECTRUM (UNDETERMINED)

File: V06892 I05941MSD HFS987A GR1E(3435.001.10 SCAN 223
PK AB 185820 SUB 300907 11:14 7.92 min.



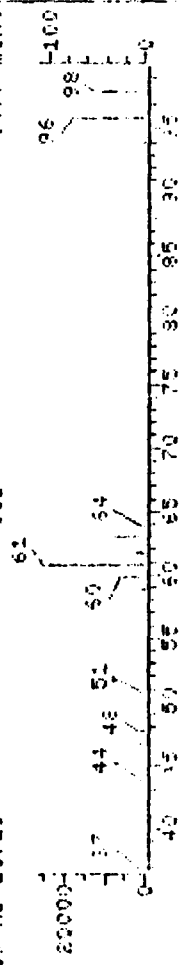
Data File: V0227321:02 Quant Output File: V0227321:01

Name: IFF1MCD
Misc: HFS987A GR1E(3435.001.100)S1
Quant Time: 8:24:19 14:43 Quant ID File: 12-02-01
Injected at: 5:04:19 17:56 Last Calibration: 5:04:19 10:05

Compound No: 20
Compound Name: 1,1-Dichloroethane
Scan Number: 223
Retention Time: 7.92 min.
Quant Ion: 96.10
Area: 106656
Concentration: 252.77 mg
d-value: 24

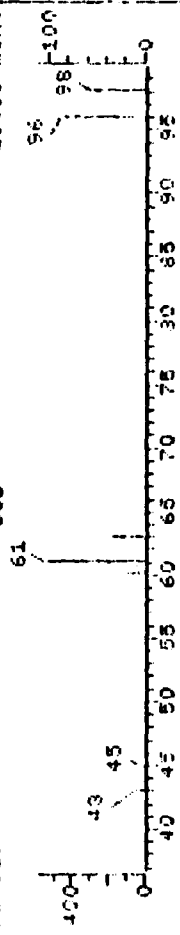
REFERENCE STANDARD SPECTRUM

File: V2321 cis/trans-1,2-Dichloroethane 220207 12:17 Scan 299
 SPS: RB 23729 SUB 9.77 min.



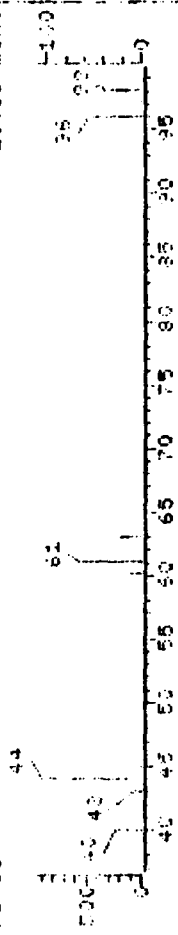
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File: V2322 13571MSD HP5987A OERIE(3435.001.10 Scan 297
 SPS: PB 529 SUB 10.06 min.



SAMPLE SPECTRUM (UNFILTERED)

File: V2322 13571MSD HP5987A OERIE(3435.001.10 Scan 297
 SPS: PB 529 SUB 10.06 min.



Date File: >V2332:02

Quant Output File: >V2332:01

Name: 13591MSD

Name: HP5987A OERIE(3435.001.100)P1

Quant Time: 890419 14:43

Quant IC File: 10V21L:02

Injected at: 890419 13:56

Last Calibration: 890419 10:38

Compound No: 12

Compound Name: 1,2-Dichloroethane (total)

Scan Number: 297

Retention Time: 10.06 min.

Quant Ion: 96.0

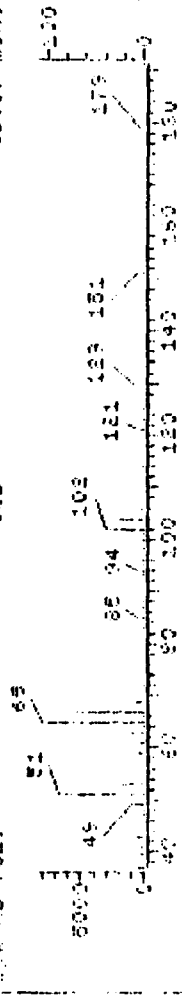
Area: 4796

Concentration: 9.57 NG

g-values: 76

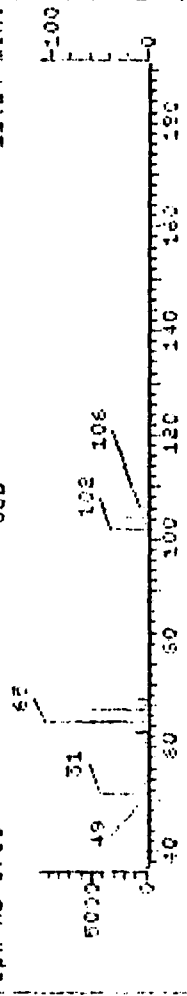
REFERENCE STANDARD SPECTRUM

File: 170291 1,2-Dichloroethane 3-4 (SUFR) 880108 08180 Scan 116
Spk AB 7925



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File: 170332 13691NSD HP3987A DBE12-8435.001.10 Scan 335
Spk AB 8735



SAMPLE SPECTRUM (UNALYSED)

File: 170332 13691NSD HP3987A DBE12-8435.001.10 Scan 335
Spk 45 8755



Date File: 2V2332:02

Quant Output File: 2V2332:01

Name: 17391NSD

Mass: HP5937A DBE12(3435.001.100)P1

Quant Time: 990419 14:43

Quant IO File: 10UML:EX

Injected at: 890419 13:56

Last Calibration: 890419 10:53

Compound No: 15

Compound Name: 1,2-Dichloroethane-d4

Scan Number: 335

Retention Time: 11.24 min

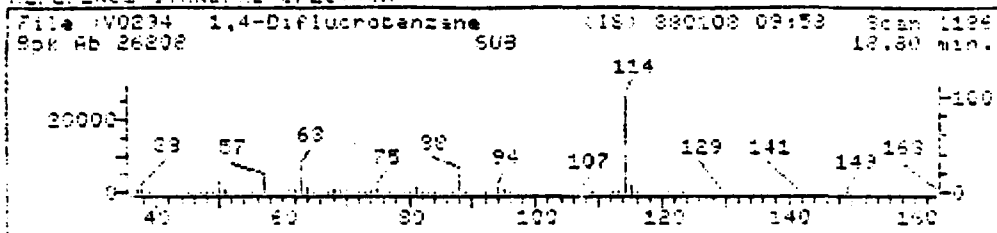
Quant Ion: 51.0

Area: 101089

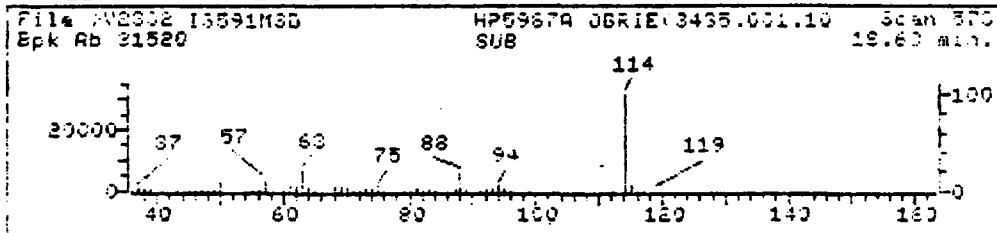
Concentration: 212.95 NG

Quality: 54

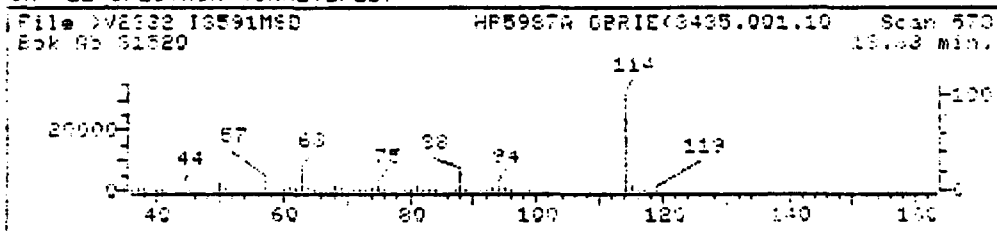
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



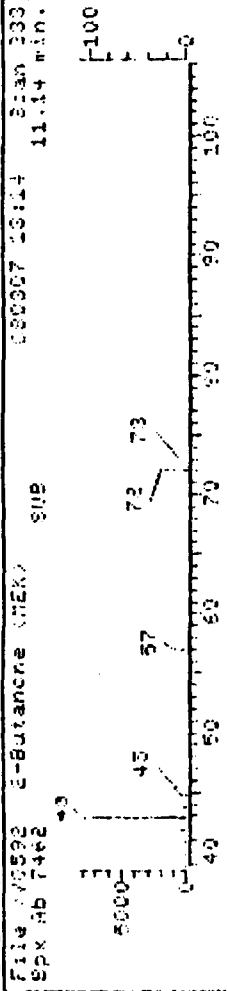
SAMPLE SPECTRUM (UNALTERED)



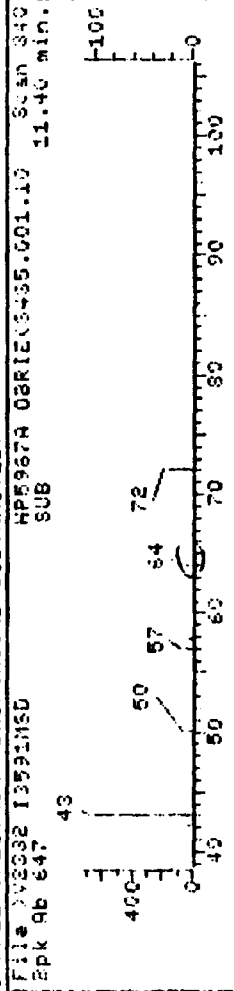
Data File: \V0232::02 Quant Output File: \V0232::01
 Name: 13591MSD
 Misc: HP5987A GRIE(3435.001.100)F1
 Quant Time: 390419 14:43 Quant ID File: ID0001::E1
 Injected at: 890419 13:56 Last Calibration: 890419 10:52

Compound No: 13 (ISTD)
 Compound Name: 1,4-Difluorobenzene
 Scan Number: 570
 Retention Time: 18.63 min.
 Quant Ion: 114.0
 Area: 376883
 Concentration: 250.00 NG
 q-value: 100

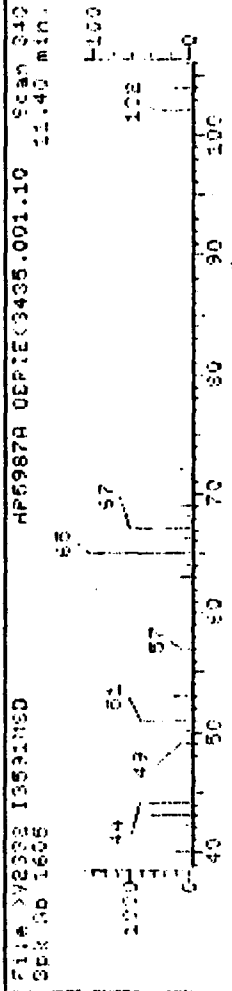
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >V2332::D2

Quant Output File: >V2332::D1

Name: 13591MSD

Name: HP5987A QEI(E)3435.001.100)P1

Quant Time: 890419 14:43

Quant ID File: 100ML1:08

Injected at: 890419 13:56

Last Calibration: 890419 10:58

Compound No: 19

Compound Name: 2-Butanone

Scan Number: 340

Retention Time: 11.40 min.

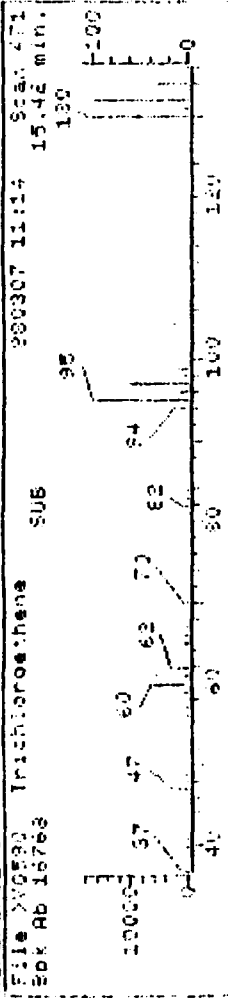
Quant Ion: 72.0

Area: 1517

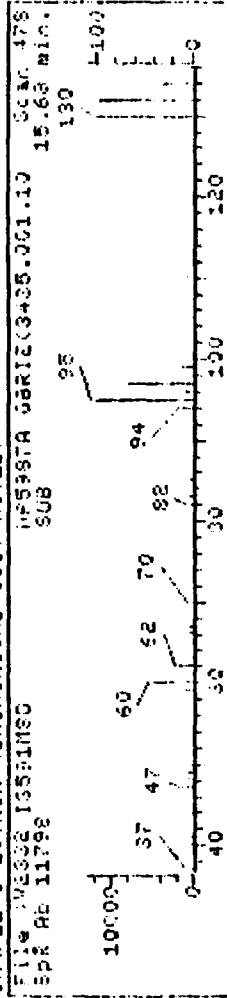
Concentration: 24.59 NG

sigma-value: 92

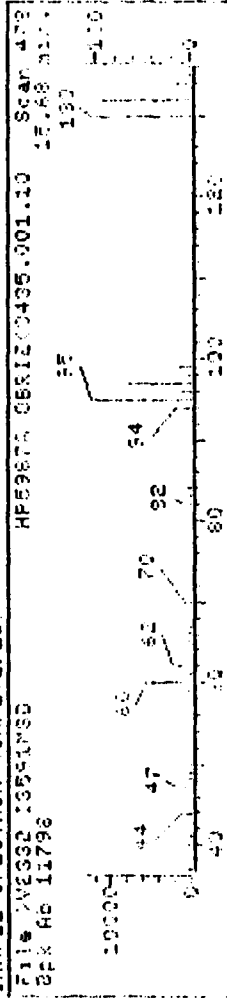
REFERENCE SCHEDULED SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNCLUSTERED)



Data File: >V0532:02

Quant Output File: >VE332:01

Name: 13591MSD

Mass: HP5987A 0812(3435.001.100)PI

Quant Time: 090417 14:43

Quant IO File: 1E0ML:EX

Injected at: 890419 13:56

Last Calibration: 890419 10:50

Compound No: 26

Compound Name: Trichloroethene

Scan Number: 471

Retention Time: 15.68 min.

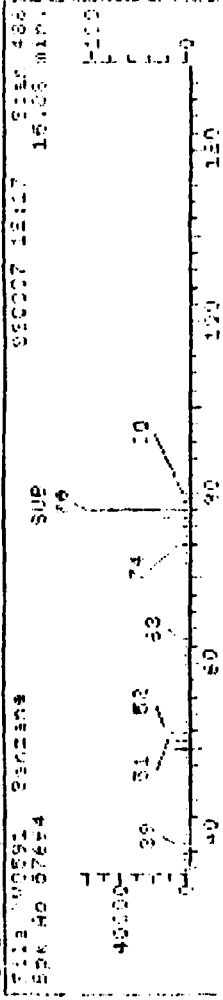
Quant Ion: 130.0

Area: 131668M

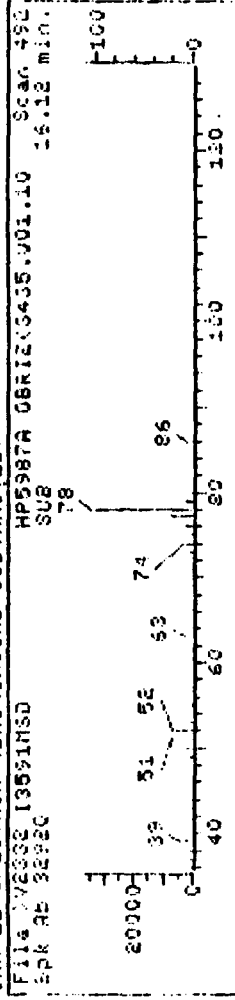
Concentration: 257.06 NG

Quality: 98

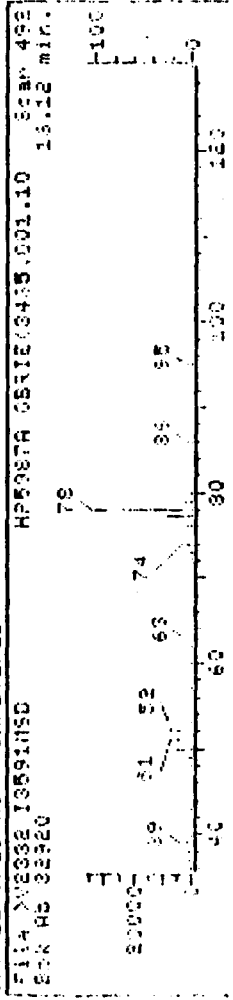
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: M02332:02

Name: 13691MSD

Name: HP5987A 08R12(3435.001.100)P1

Quant Time: 890419 13:43

Injected at: 890419 13:56

Quant Output File: M02332:01

Quant ID File: 10000153

Last Calibration: 890419 10:40

Compound No: 27

Compound Name: Benzene

Scan Number: 492

Retention Time: 16.12 min.

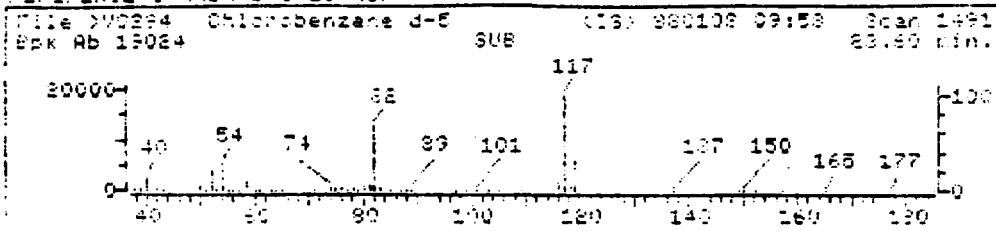
Quant ID: 78.0

Area: 392129

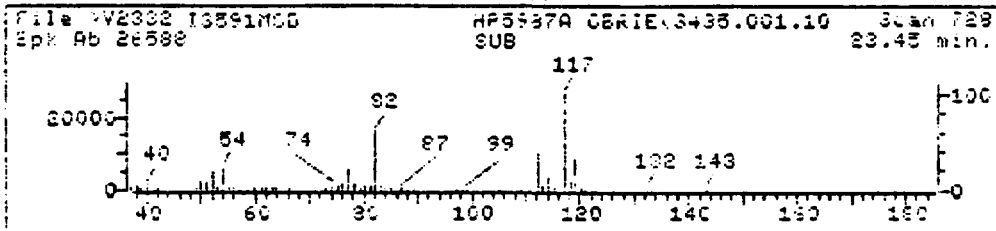
Concentration: 255.71 NG

Quality: 100

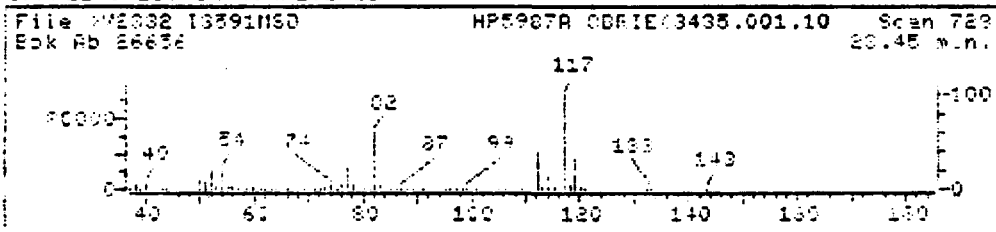
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



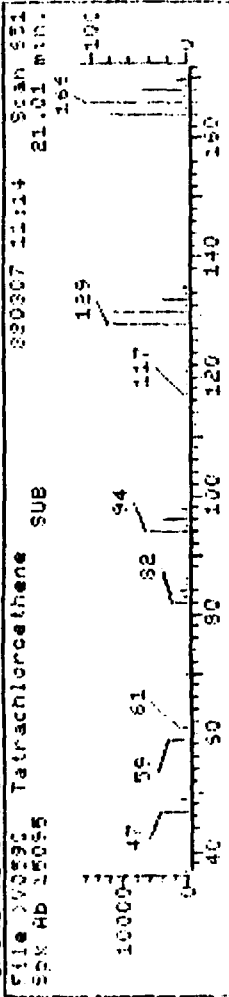
SAMPLE SPECTRUM (UNALTERED)



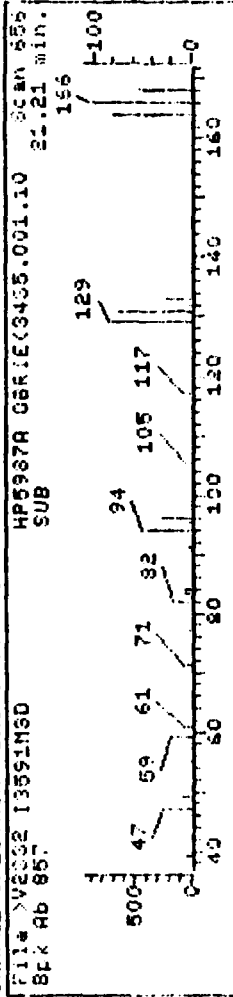
Data File: >V2532:=02 . Quant Output File: >V2532:=01
 Name: 13591MSD
 Misc: HP5987A GBFIE(3435.001.100)F1
 Quant Time: 890419 14:45 Quant ID File: 100ML:=05
 Injected at: 890419 13:56 Last Calibration: 890419 11:58

Compound No: 52 (ISTD)
 Compound Name: Chlorobenzene-d5
 Scan Number: 728
 Retention Time: 23.45 min.
 Quant Ion: 117.0
 Area: 330984M
 Concentration: 250.00 NG
 q-value: 97

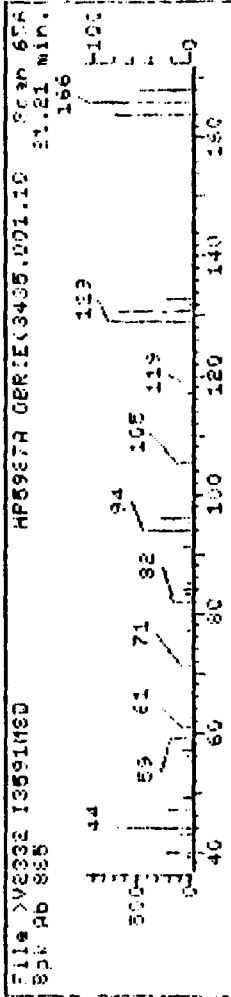
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Date File: >U2332:ID2

Quant Output File: ^U2332::D1

Name: I3591MSD

Misc: HP5987A GERIE(3435.001.100)P1

Quant Time: 890419 14:43

Quant ID File: IDVML:EX

Injected at: 890419 13:56

Last Calibration: 890419 10:58

Compound No: 35

Compound Name: Tetrachloroethene

Scan Number: 656

Retention Time: 21.21 min.

Quant Ion: 164.0

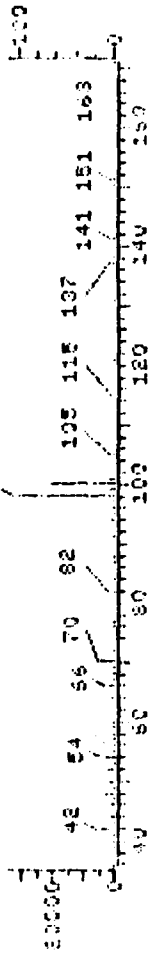
Area: 7931

Concentration: 17.74 NG

q-value: 91

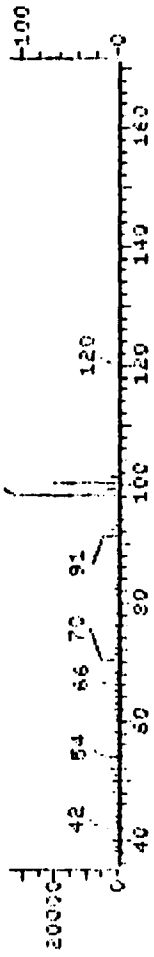
REFERENCE STANDARD SPECTRUM

File: \V0294 Toluene 3-9 (SURR) 880108 09:58 Scan 1414
 Spk Ab: 31080 SUB 98 22.39 min.



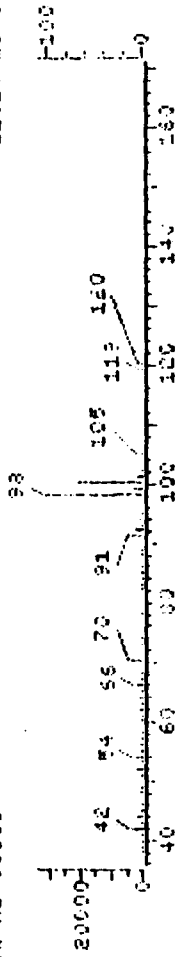
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File: \V0302 13591MSD HP5987A 08RIE\3435.001.10 Scan 689
 Spk Ab: 30880 SUB 93 22.24 min.



SAMPLE SPECTRUM (UNALTERED)

File: \V0302 13591MSD HP5987A 08RIE\3435.001.10 Scan 689
 Spk Ab: 30880 SUB 93 22.24 min.



Data File: \V2332::D2

Quant Output File: \V2332::01

Name: 13591MSD

Misc: HP5987A 08RIE\3435.001.100)P1

Quant Time: 390419 14:43

Quant ID File: 130ML:EQ

Injected at: 890419 13:56

Last Calibration: 890419 10:58

Compound No: 37

Compound Name: Toluene-d8

Scan Number: 689

Retention Time: 22.24 min.

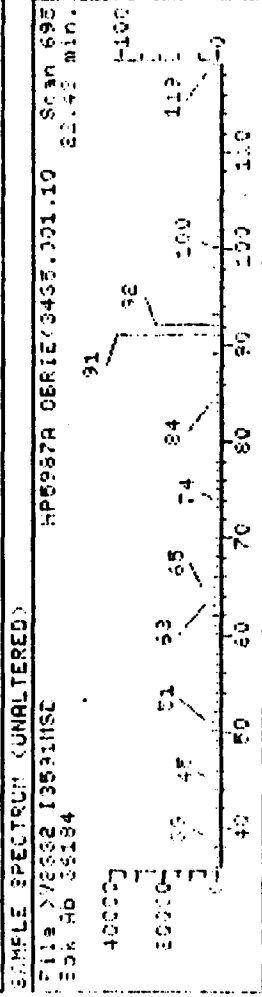
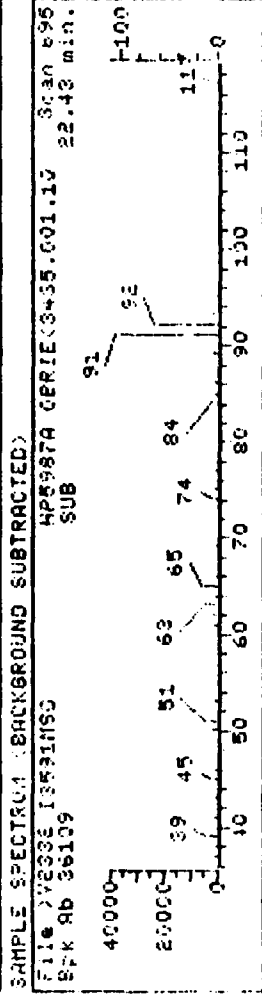
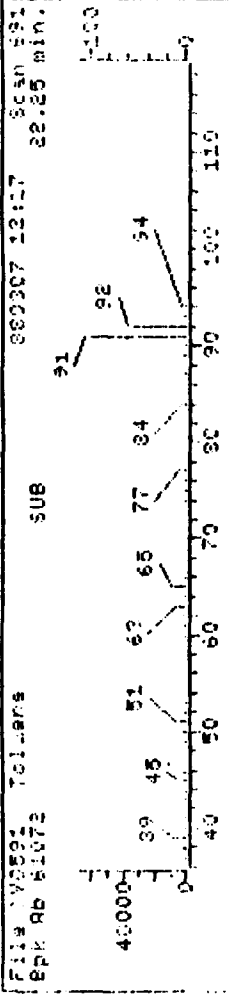
Quant Ion: 75.0

Area: 352625M

Concentration: 215.08 NG

q-value: 100

REFERENCE STANDARD SPECTRUM



Data File: >V2332:02

Quant Output File: ^V2332:01

Name: 13531MSD

Miss: HP5987A GERIE(3435.001.100)PI

Quant Time: 390419 14:43

Quant ID File: IDUML:50

Injected at: 390419 13:56

Last Calibration: 390419 10:50

Compound No: 36

Compound Name: Toluene

Scan Number: 695

Retention Time: 22.43 min.

Quant Ion: 92.0

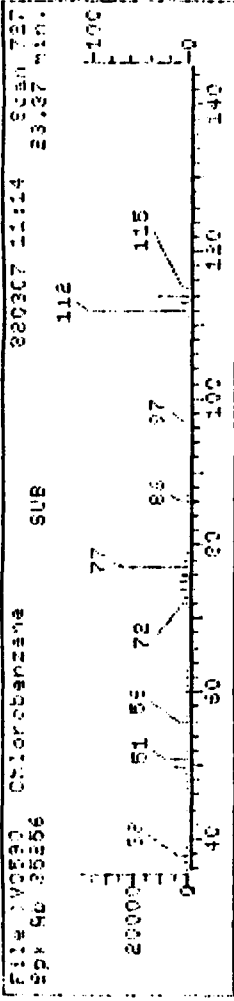
Area: 259649M

Concentration: 244.91 NG

G-value: 93

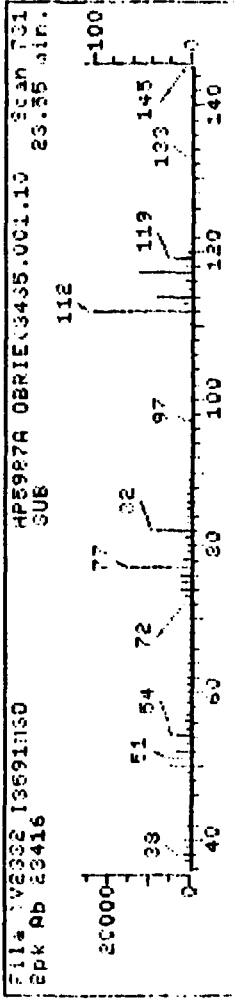
REFERENCE STANDARD SPECTRUM

File: \V0593 Chlorobenzene
Spk Ab 25356



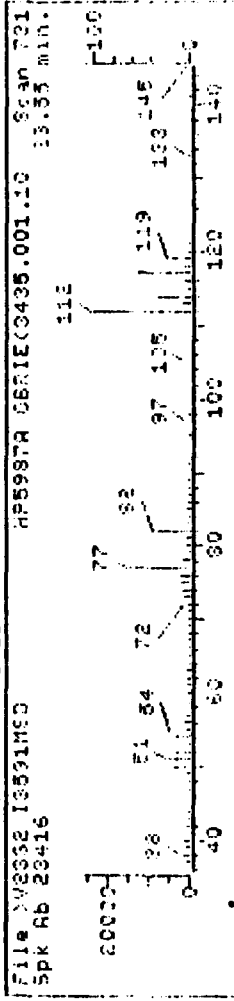
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File: \V0592 I3691HSO
Spk Ab 23416



SAMPLE SPECTRUM (UNALTERED)

File: \V0592 I3691HSO
Spk Ab 23416



Data File: \V02332:02

Quant Output File: \V02332:01

Name: I3591NSD

Miss: HP5927A OBRIE(3435.001.100)P1

Quant Time: 350419 14:43

Quant ID File: I00ML:EX

Injected at: 890419 13:56

Last Calibration: 890419 10:50

Compound No: 39

Compound Name: Chlorobenzene

Scan Number: 731

Retention Time: 23.55 min.

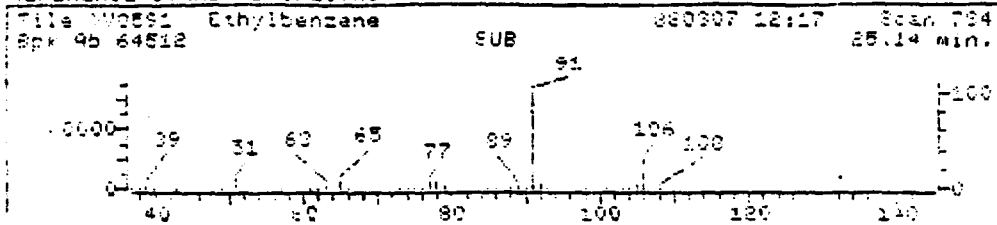
Quant Ion: 112.0

Area: 305000

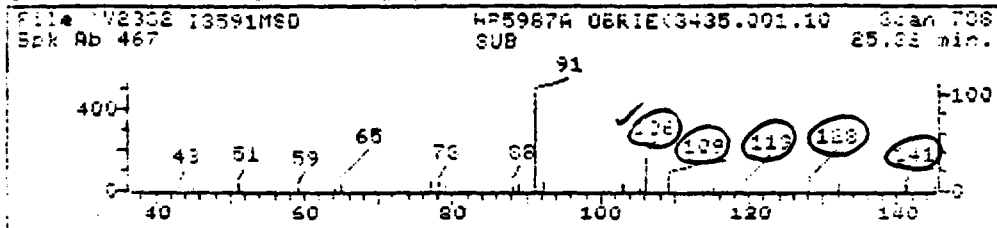
Concentration: 234.25 NG

q-value: 99

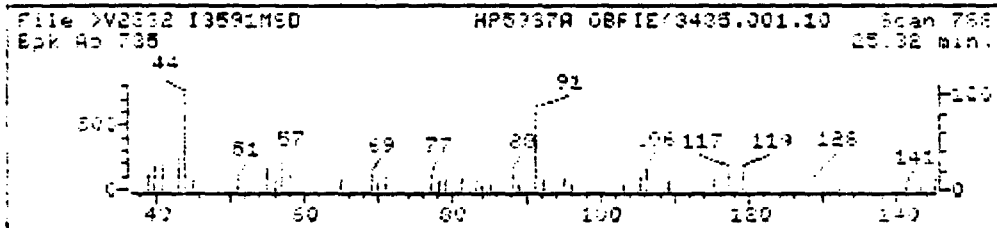
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



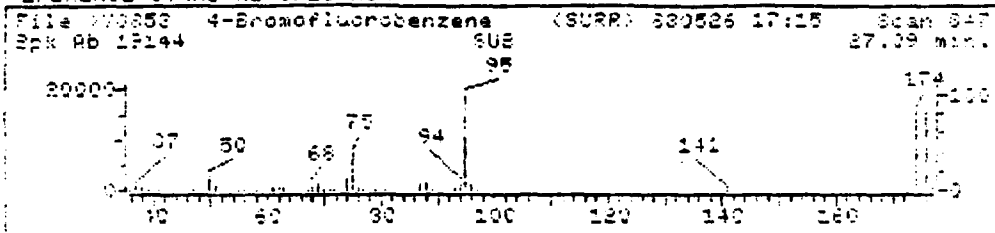
SAMPLE SPECTRUM (UNALTERED)



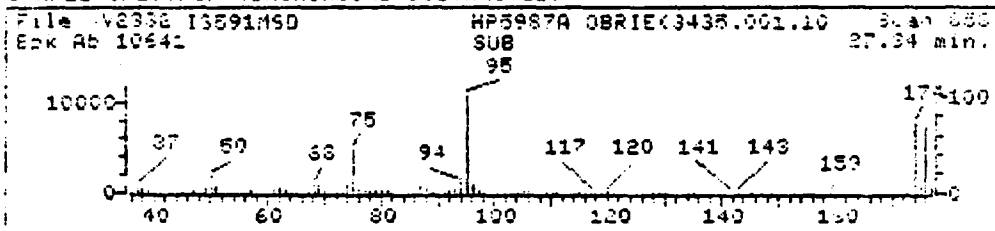
Data File: >U2332:02 Quant Output File: >U2332:01
 Name: I3591MSD
 Method: HP5987A DBFIE(3435.001.100)P1
 Quant Time: 890419 14:43 Quant ID File: IDVNL:EX
 Injected at: 890419 13:56 Last Calibration: 890419 10:52

Compound No: 40
 Compound Name: Ethylbenzene
 Scan Number: 798
 Retention Time: 25.32 min.
 Quant Ion: 106.0
 Area: 2387M
 Concentration: 3.81 NG
 Precision: 86

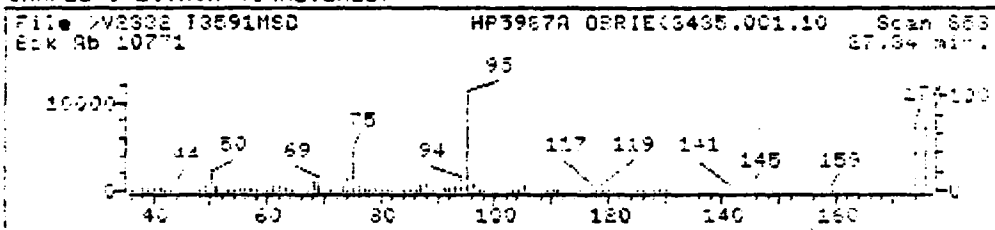
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: V02852:02

Quant Output File: V02852:001

Name: I3591MSD

Misc: HP5987A OBRIE(3435.001.100)P1

Quant Time: 890419 14:43

Quant ID File: I3591MSD

Injected at: 890419 13:56

Last Calibration: 890419 10:07

Compound No: 41

Compound Name: Bromofluorobenzene

Scan Number: 953

Retention Time: 27.34 min.

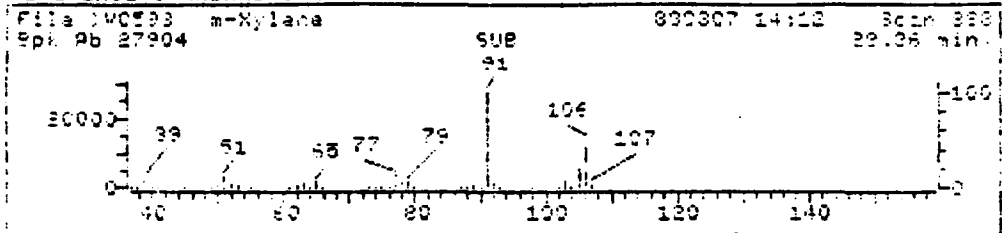
Quant Ion: 95.0

Area: 178477M

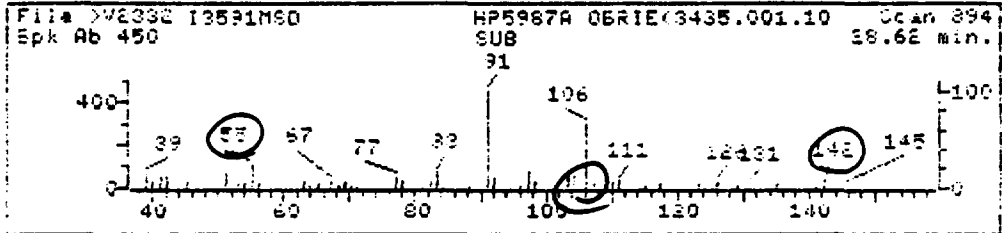
Concentration: 213.51 NG

qvalue: 95

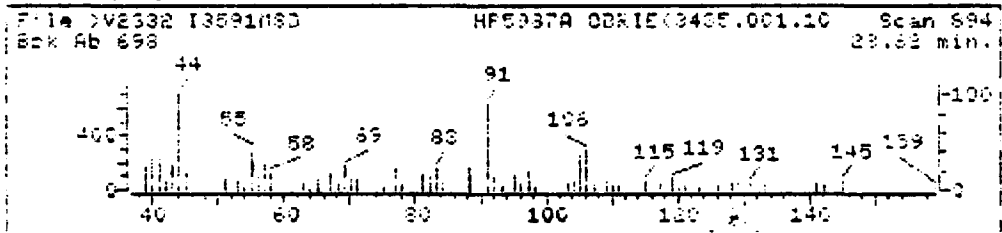
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Date File: >V2332::D2

Quant Output File: ^V2332::D1

Name: I3591MSD

Misc: HP5987A DBEIE(3435.001.10)P1

Quant Time: 890419 14:43

Quant ID File: IQVML::EX

Injected at: 890419 13:56

Last Calibration: 890419 10:58

Compound No: 43

Compound Name: m-Xylene

Scan Number: 894

Retention Time: 23.62 min.

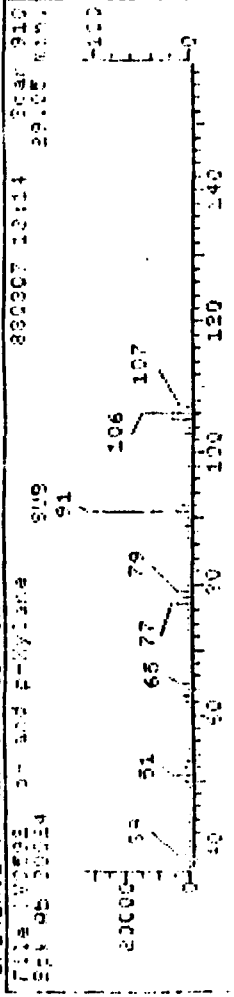
Quant Ion: 106.0

Area: 5012M

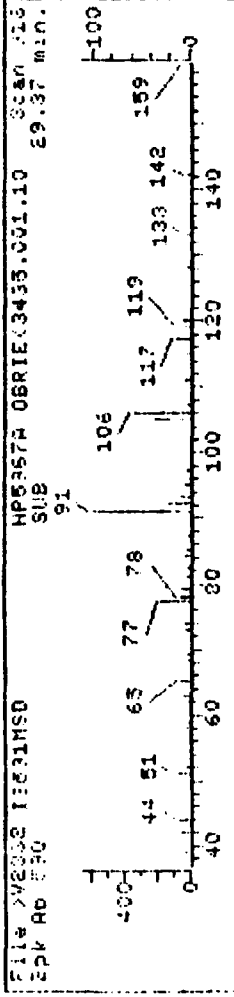
Concentration: 6.57 NG

sigma-value: 77

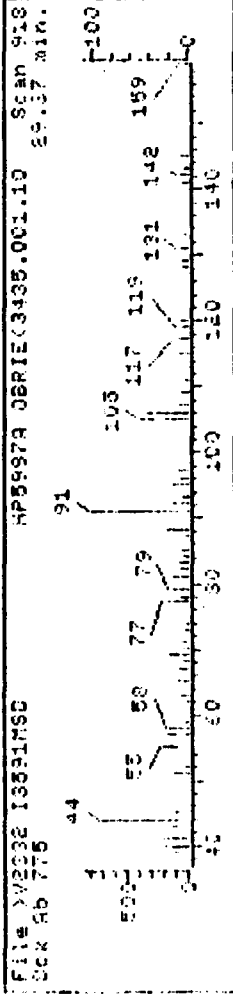
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Date File: X20332:02

Quant Output File: X20332:01

Name: 13531MSD

File: HP5987A 08RIE(3435.001.100)P1

Acq Time: 890419 14:43

Quant ID File: 10V01:58

Injected at: 890419 13:56

Last Calibration: 890419 13:58

Compound In: 44

Compound Name: Xylene (total)

Scan Number: 918

Retention Time: 29.37 min

Quant Ion: 103.0

Area: 4548M

Concentration: 0.76 ug

Response: 73

✓ compare w/MS & sample